EFFECTS OF TRANSITION-GRADE PLACEMENT ON YOUNG CHILDREN'S PERCEIVED ACADEMIC COMPETENCE

By

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Abstract of Dissertation Presented to the Graduate School
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EFFECTS OF TRANSITION-GRADE PLACEMENT ON YOUNG CHILDREN'S PERCEIVED ACADEMIC COMPETENCE

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The purpose of this study was to examine the associations between children's perceived competence and actual academic competence among three groups of children: kindergartners, "pre-first" graders, and first graders. The pre-first grade students were those who, due to academic difficulties or other reasons, were deemed unready to progress from kindergarten to first grade in a traditional manner. They were, therefore, placed in a transitional program for an additional year of instruction preceding their promotion to the first grade.

It was hypothesized that children placed in a transition grade program would be more accurate in their self-evaluations. Specifically, the correspondence between perceived and actual competence would be greater in students enrolled in the pre-first program than for students attending regular kindergarten and first grade classes. Additionally, the extent to which children's perceived competence was predicted by different variables was examined. Results indicated that a significant difference in the perceived competence/actual ability relationship existed between groups. Specifically, kindergarten students were found to significantly overestimate their skill level relative to actual achievement. Although pre-first grade students were noted to be relatively more accurate in their perceptions of academic skills, and first graders tended to underestimate their skill level, a significant difference between these groups was not found. Further analysis indicated that while achievement test scores predicted students' perceived competence, exposure to failure (i.e., placement in the pre-first grade program) did not predict perceived competence. While not a central hypothesis of this study, teacher ratings of students' academic competence were found

to be a significant predictor of children's perceived competence.

Implications concerning the nature of perceived competence development in young children, and the relationships between perceived and actual competence in retained vs. non-retained children, are subsequently presented.

CHAPTER 1
INTRODUCTION

The study of children's self-concept has been an area of significant research interest for decades. Self-concept has been defined as including cognition and evaluation of specific aspects of the self, the ideal self, and global self-regard (Wylie, 1979). Oosterwegel and Oppenheimer (1993) define self-concept as a component of the self-system, which is considered from one's self-perspective, or the perceived perceptions of others. Shavelson, Hubner, and Stanton (1976) proposed that the definition of self-concept should consist of specific features of the construct (within-construct features) and indicate how self-concept is related to other constructs (between-construct features). Varying conclusions have been reached regarding whether young children perceive a general self-concept, or are unable to do so (Harter & Pike, 1984a; Marsh, Craven, & Debus, 1991). Marshall (1989) noted that as children get older, self-concept is increasingly differentiated into various domains, such as social versus cognitive self-concept. Likewise, Shavelson et al. (1976) noted that as children develop, specific facets of self-concept are increasingly distinguished from one another, such as the process wherein academic self-concept is later differentiated into evaluations concerning one's math or verbal skills.

Perceived competence has been emphasized as a sub-category of self-concept, encompassing beliefs about one's ability to be effective in particular areas (Marshall, 1989). It has been defined as self-concept perceived from the perspective of others (Oosterwegel & Oppenheimer, 1993). Perceived competence develops similarly to self-concept, in that over-estimations of skills and perceptions of concrete and overt behaviors progress to more complex and increasingly accurate self-evaluations and expectations (Harter, 1996a, Parsons & Ruble, 1977). Perceived competence has been found to be significantly related to positive feelings toward the self (Verschueren, Marcoen, & Schoefs, 1996).

One component of the study of perceived competence is whether children are able to evaluate their own abilities and skills accurately (Anderson & Adams, 1985). Research in this area has yielded various findings. For instance, some research has shown that children inaccurately perceive their competence when compared to teacher ratings (Stipek, 1981) or school readiness (Gullo & Ambrose, 1987), while others have shown that even five-year-old children are able to accurately perceive their competence when compared to actual academic achievement (Anderson & Adams, 1985).

Self-concept has also been examined in relation to the effects of retention and transition-grade placement. Transition-grade programs are known by a variety of names, but typically intend to provide children who are not academically or socially ready to progress to the next grade with an additional year of school experience. In sum, the majority of research evidence indicates that retention and transition-grade placement do not benefit children in terms of their self-concept. For instance, parent reports have indicated that children who are retained are teased by peers and display a sense of failure (Shepard & Smith, 1989). They have also been determined to perceive themselves as failing and to experience feelings of disappointment related to the perceived failure (Niklason, 1984). Specific to transition programs, experts (e.g., Elkind, 1987) believe that young children are aware of the fact that they are not eligible to continue to a regular first grade class. Further, young children are aware of their lack of progress in comparison to same-age peers (Shepard & Smith, 1988). Overall, research on self-concept of children retained in various manners, including transition-grade programs, suggests little to no benefit in terms of children's self-concept.

Statement of the Problem

Academic achievement, grade retention, and children's perceptions are each areas of research interest, as well as areas of concern to parents, teachers, and related education professionals. Researchers have emphasized the need for continued study of what is called the five to seven year transition (Sameroff & Haith, 1996), a time in children's lives during which formal school experiences and interactions with others can greatly influence children's development. The study of children's self-concept and perceived competence has been a continual area of interest for researchers from a variety of disciplines. Grade retention, as always, is a controversial area with both its advocates and its critics. The implementation of various forms of transition-grade programs, that serve as a form of grade retention, is a practice that has been determined to have effects similar to regular retention.

Various studies have addressed the impact of retention and transition-grade placement on young children's self-concept. Fewer studies have utilized direct measures of children's abilities in relation to their perceived competence to determine the accuracy of children's self-perceptions. Furthermore, studies that have examined relations between children's perceived competence and actual academic achievement or cognitive ability have yielded conflicting results.

As academic demands on children increase, and children are expected to meet such demands successfully, the impact of failure on children during their formative school years has obvious significance. Therefore, further examination of the impact of retention, specifically transition-grade placement, on children's perceived competence is warranted, given the impact such information might have on curriculum, teacher-student interactions, and further implementation of such programs.

Purpose of the Study

The current study drew upon previous research in the areas of self-concept, perceived competence, and student grade retention in examining the associations between children's perceived competence and actual competence among three groups of children. These groups were kindergartners, first graders, and a group of children who, due to academic or other difficulties, were deemed unready to progress to the first grade and had been placed in a remedial class. One purpose of this study was to examine the effect of transition grade placement on the correspondence between perceived and actual competence. It was hypothesized that children participating in such programs would be more accurate in their self-perceptions of competence. A second purpose of this study was to assess the extent to which children's perceived competence was predicted by selected variables.

Hypotheses

1. Children placed in transition-grade programs were better able to evaluate their own competence than students attending regular classes. Specifically, the correspondence between perceived and actual competence was predicted to be greater for children placed in transition-grade programs than for students in kindergarten and first grade classes.

2. Transition-grade, kindergarten, and first grade children's perceived competence was predicted by their actual academic competence, age, exposure to failure (i.e., placement in the pre-first grade program vs. non-placement), and the interaction of academic achievement and exposure to failure.

CHAPTER 2
REVIEW OF LITERATURE

Background of Self-Concept Research

Kindergarten and early elementary school are years of significant development for young children, leading to physical, social, and intellectual changes. The primary school years are a time of learning, practicing, and mastering many developmental tasks. Children's success in attaining such skills can have a significant impact on their later development. Furthermore, their perceptions of their skills can have a similar, or perhaps even more profound, impact on not only skill attainment and interest but on the development of their self-concept, identity, and feelings of competence. While research with children during the primary school years is commonly conducted, researchers themselves have emphasized the need for investigation of what is called the "five to seven year transition", highlighting changes in children's school adjustment, social-emotional functioning, and cognitive abilities (Sameroff & Haith, 1996). While a chronologically short time period, Harter (1996a) further noted that the development of children during this time encompasses a vast developmental span in psychological terms.

Early school experiences allow children many opportunities both for feedback from adults regarding their strengths and weaknesses, and for feedback from their peers. Displaying positive characteristics often solicits positive responses from peers, as well as praise or encouragement from adults who are significant in their lives; negative characteristics could just as likely elicit negative reactions from significant others. Whether or not a child's physical, social, or cognitive capabilities are actually more limited than that of their peers, a self-perception that they are could contribute to feelings of inferiority.

Research has often examined the contribution of a child's self-concept to their current levels of development as well as their eventual developmental outcome. As stated by Marsh et al. (1991), "a positive self-concept is valued as a desirable outcome and as a potential mediating influence leading to other desired outcomes such as academic achievement" (p. 377). A child begins internalizing an opinion as to their own abilities and worth early in life, and is typically influenced by feedback received from others, including parents and peers.

In addition, it is particularly during the early school years that children begin the cognitive construction of the self, which allows them to describe and evaluate themselves in relation to others (Harter, 1996a). Views which are formed as to one's abilities or lack of skills during this time may be of varying accuracy, and negative views in particular may be needlessly damaging to a young child's developing self-concept.

Defining Self-Concept

The study of self-concept is often criticized. One criticism of self-concept research that has been emphasized by researchers since the 1960s is the lack of sound and uniformly accepted definitions of self-concept. As noted by Marsh and Hattie (1996), "self-concept, like many other psychological constructs, suffers in that everybody knows what it is, so that many researchers do not feel compelled to provide any theoretical definition of what they are measuring" (p.56) (see also Marsh, Byrne, & Shavelson, 1992). This view unfortunately may preclude researchers from providing a theoretical definition of self-concept (Marsh et al., 1992). Therefore, self-concept research often appears to lack a substantial theoretical basis. While self-concept research was often conducted, Marsh et al. (1992) further noted that empirical support for the usefulness of such research was weak. Numerous researchers concur with the view that past studies have lacked a strong theoretical basis, utilized poor measurement instruments, evidenced various methodological short comings, and suffered from a lack of consistent findings (Wylie, 1979, 1989). Such views were also offered relatively early in self-concept research, as Coopersmith (1967) noted that

> there have been theories and speculations in number, but these have not been subjected to more critical empirical analysis and investigation. The net result is that we have several free-floating hypotheses regarding the conditions that produce and affect feelings of confidence, superiority, and optimism, but little basis for determining their validity or selecting between contrary claims. (p. 19)

Regarding the definitional issues, Wylie (1979) defined self-concept as including cognition and evaluation of specific aspects of the self, the ideal self, and global self-regard which accounts for constructs comprising self-concept including self-esteem and self-acceptance. Oosterwegel and Oppenheimer (1993) define self-concept as a component of the self-system which is considered from one's self-perspective or the perceived perceptions of others. In their influential review of self-concept research and proposals for future research in the area of children's self-concept, Shavelson et al. (1976) defined self-concept in perhaps the most thorough manner to date. They proposed that the definition of self-concept should consist of a description of specific features of the construct (within-construct features) as well as how self-concept is related to other constructs (between-construct features). Shavelson et al. (1976) more specifically defined self-concept as a person's self-perceptions that are formed through experience with their environment. Self-concept development is also influenced by the evaluations of others, reinforcement, and attribution for the individual's own behavior. Furthermore, self-concept is both an outcome and a mediating variable (Shavelson et al., 1976).

Among the critical features of the self-concept construct outlined by Shavelson et al. (1976), they suggested that self-concept should include organized information about the self that gives meaning to experiences. They further defined self-concept as a multi-faceted construct, which is hierarchical in design. Relating to the hierarchical construction of the self-concept, Shavelson et al. (1976) noted that self concept is more stable as the hierarchy is ascended, and less stable as the hierarchy is descended and the components become more specified. As has been emphasized by later researchers, self-concept becomes increasingly multifaceted with age, wherein children are increasingly able to identify and evaluate themselves and others in more specific and varied ways (Gesell & Ilg, 1946; Harter, 1996a; Shavelson et al., 1976).

Several terms have been used interchangeably to represent the self-concept construct. In his review of the development of self-concept Marshall (1989) defines self-concept as the "perceptions, feelings, and attitudes that a person has about himself or herself" (p. 45). Seemingly drawing upon the hierarchical model of self-concept, Marshall (1989) further notes that one's global self-concept is comprised of several dimensions. One of these dimensions is self-esteem, which he perceives as referring to self-evaluations. While self-esteem is considered to be a dimension of self-concept, Marshall differentiates it from self-concept in that he notes that self-esteem refers to judgements of self-worth, while self-concept also refers to additional aspects of the self including physical characteristics, psychological traits, gender identity, and ethnic awareness. Another dimension of the global self-concept according to Marshall is perceived competence, which he states reflects one's beliefs about one's own ability to succeed at various tasks. An additional domain of self-concept identified by researchers is that of personal control, relating to mastering the environment and developing an internal or external locus of control (Harter, 1983; Marshall, 1989). Research has shown that children's self-concept includes descriptive and evaluative beliefs about specific characteristics, and is differentiated from self-esteem which is considered to be the global feelings children have about their overall worth (Burnett, 1994).

Self-concept has been, and continues to be, an area of frequent research interest in both theoretical and applied education and psychology. The influence of children's positive or negative self-concept can be far-reaching, affecting both their current functioning and development as well as their later development and outcome. For instance, poor self-concepts and low self-esteem have been associated with lower academic achievement and retention (Shepard & Smith, 1987) and juvenile delinquency (Levy, 1997). Positive self-concepts, in contrast, have been found to be associated with student characteristics such as higher achievement and higher levels of compliant behavior (Strain et al., 1983), as well as social acceptance and behavioral adjustment (Verschueren et al., 1996). The profusion of information which exists relating to self-concept, whether theoretical discussion of the development and structure of self-concept, or applied research relating to the influence of self-concept on children and adults, points to the continued interest in this area. However, in reviewing this research it is easy to become bogged down in interchangeably used terms and poorly defined constructs. The fact that the confusion in describing and studying this construct is being addressed suggests that continued research on self-concept will likely, at some point, have more sound theoretical bases and better-defined use of self-concept terminology.

The Structure of Self-Concept

Work in the area of children's self-concept has been carried out by researchers from several disciplines within the fields of education and psychology, including social psychology, developmental psychology, and early childhood and elementary education. A number of past theorists have examined the development of self-concept and various approaches to its study have been proposed. William James (1892/1963) emphasized that there are two distinct but related aspects of the self. One component of the self, called the empirical self, is described by James (1892/1963) as the "sum total of all that he can call his" (p. 177). James (1892/1963) further elaborated that the self is divided into three components: the constituents, the feelings that are aroused, and the actions initiated by those feelings. The constituents are comprised of three aspects: material, social, and spiritual concepts of the self, as well the feelings and emotions one experiences which are subsequent to the constituents. The other component of self described by James is the self as knower, or the self that is conscious of the empirical self. James (1892/1963) also addressed the presence of overall feelings of self-worth, often later referred to as self-esteem or global self-concept, defined by the ratio: self-esteem = success (or actual abilities) divided by pretensions (or possible potential).

Piaget's theories of child development, particularly children's development during the pre-operational and concrete operations periods, are very relevant to the study of self-concept and have provided the basis for a substantial research base in child development, education, and psychology. Piaget addressed many facets of cognitive development in young children, as well as children's perceptions of the world and of themselves. According to Piagetian theory, children's cognitive ability is described as progressing from absolute realism, to immediate realism, to mediate realism, and finally to subjectivism, wherein children's cognition gradually transitions from confusing the self and thought with the world to being able to

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distinguish these terms from one another. Piaget proposed that young children's thought processes are transductive, in that pre-operational reasoning lacks a logical order (Harter, 1996a). Piaget emphasized that young children move through various developmental stages with achievements in each stage adding to those previously attained, and that when children progress to more advanced stages of development, behavior in every domain of cognition changes (Sameroff & Haith, 1996). Harter (1986) has outlined several developmental sequences in self-understanding, noting that children progress from self-description of very concrete attributes during early childhood to trait descriptions during later childhood. Children also develop the ability to compare self-characteristics to characteristics of another to evaluate their own skills. Such skills typically develop during the concrete operations period (Harter, 1986). Pre-operational children's exaggerated self-perceptions of ability may lead to their confusing their desire for competent behavior and positive feelings with realistic judgements of ability (Stipek, 1981). As children continue through the concrete operations period, they begin to use observable, concrete characteristics to define and describe themselves, and are also better able to understand others' perceptions of them (Harter, 1983).

Gesell also contributed to the study of self-concept in children through his study of developmental changes in self-awareness. Gesell and Ilg (1946) describe young children as gradually transitioning from preoccupation with other's behavior to concern about what others think of them, leading to feelings of self-consciousness. Five-year-olds are described as living in the world of the present, with their main interests being limited to their immediate experiences. Six-year-old children tend to be concerned with their friends' behavior, and are able to critically evaluate the competence and characteristics of other children. Seven-year-olds were noted by Gesell and Ilg to be further forming their sense of self, and to be concerned about others' perceptions of them. At this age children also were noted to express shame and embarrassment when others negatively evaluate them. Furthermore, Gesell and Ilg describe children at this age as capable of understanding others' critical evaluations of themselves but still lacking the ability to fully self-evaluate. Also at approximately seven years of age, children are concerned about the evaluations of significant others (such as parents and peers), but still work to achieve their own standards as opposed to those of others. Eight-year-old children are more aware of themselves, and of how the self differs from other persons. At this point children refer to their "self", are interested in critically evaluating both themselves and others, and find social comparisons to be very important. Eight-year-olds are more conscious of how their self differs from others. If they understand other people's standards to be very high, these discrepancies can often be exaggerated. Self-evaluations become more critical at age eight, and discrepancies between self-perceptions and perceived outside expectations can lead to anxiety or bold over-estimations.

Early social psychologists, including Mead and Cooley, have argued that self-concept and awareness is defined through social interaction with others (Harter, 1983; Hatch, 1994). Mead based his work on the theory that language-mediated social interaction leads to self-awareness, and that self-concept and awareness involve both knowledge of the self and the ability to take the perspective of another towards the self (Mintz, 1995). The phrase "looking-glass self" introduced by Cooley (1902/1968) describes the notion of self-feeling or self-concept as a reflection of how individuals perceive others' perceptions of themselves. The self-idea, according to

Cooley, is comprised of three main elements: the imagined appearance of the self to others, the imagined judgement by others of one's appearance, and self-feelings. Similar to theories proposed by Mead, it has been asserted that a person is able to know the self only through knowing about others, emphasizing the influence of the social environment (Oosterwegel & Oppenheimer, 1993). Social psychology and the study of impression management has further contributed to the study of children's self-concepts, as it has been noted that children's self-concepts can be improved by learning to create favorable impressions upon significant others (Hatch, 1994).

Early self-concept research held in common its view of the self as a multidimensional construct. Later research on self-concept transitioned from theories of the self as a multidimensional construct to that of a uni-dimensional or global construct. Through his research on the development of self-concept in children, Coopersmith (1967) purported that during childhood people arrive at a general appraisal of their self-worth. This general view of the self, or global self-concept, was noted to remain relatively stable and to endure through further development (Coopersmith, 1967). Further emphasizing the importance of global self-concept, Coopersmith (1967) reported that significant differences were not found between children’s self-appraisals in different, specific areas, leading to the conclusion that "either preadolescent children make little distinction about their worthiness in different areas of experience or, if such distinctions are made, they are made within the context of the overall, general appraisal of worthiness that the children have already made” (p. 6). The emphasis on global self-concept highlights early theorists' views that evaluation of the self is based upon a general feeling of self-worth (James, 1892/1963).

However, criticism of the global self-concept construct has arisen, and researchers have noted that the global self-concept research was somewhat lacking in that it is unable to account completely for behavior, and that studies in this area suffer from methodological problems (Wylie, 1979). The presence of, or understanding of, global self-concept in young children (e.g., younger than eight years of age) has also been disputed (Harter, 1982). Currently, the self-concept is again frequently regarded as a multidimensional construct involving interaction between the self and the social environment (Oosterwegel & Oppenheimer, 1993). The multidimensional or differentiated view of self-concept, wherein self-concept varies dependent upon the particular characteristics an individual is considering about themselves, has become the prevailing model and is noted to describe self-evaluation more adequately than does global self-concept alone. Research by Harter (1982), Marsh (1986), and Oosterwegel and Oppenheimer (1993) among others supports the multidimensional view of self-concept.

Some researchers have noted, however, that the global view of self-concept or self-esteem discussed in early literature by James and supported by researchers such as Coopersmith (1967) and Piers (1977) has not completely fallen out of favor (Harter, 1996b). Rather than emphasizing one model at the expense of the other, research has used hierarchical models of self-concept to address both issues and better address the development and measurement of self-concept. Epstein (1973) proposed a hierarchical model of self-concept where self-esteem, or the general feeling of self is at an apex, with subcategories such as general competence, self-approval, power, and worthiness considered to be representative of the various dimensions within the overall global view of the self. Further down the hierarchy lie general competence areas, such as mental and physical ability, succeeded by more specific abilities and skills (Epstein, 1973). Harter (1982) emphasized Epstein’s view of self-concept development, noting that children of eight years of age and older can differentiate various aspects of self-concept, as well as begin to understand and express feelings of general self-worth.

In an often cited hierarchical model of self-concept, Shavelson et al. (1976) proposed a model of self-concept with general self-concept at the highest point, and increasingly differentiated aspects of self-concept at varying levels below. Specifically, they divided general self-concept into academic, social, emotional, and physical self-concept, with the latter three considered non-academic forms of self-concept. Each of those levels of self-concept was divided into sub-areas, which could in turn be differentiated into behavior related to self-concept in very specific situations. This theoretical model of self-concept was subsequently used as the basis for numerous studies of self-concept (i.e., Marsh & Shavelson, 1985; Marsh et al., 1991).

Despite disagreement regarding the age at which children are able to distinguish general vs. specific aspects of the self, the need to examine the overall or global self-concept is warranted (Marsh et al., 1992). One caveat of research examining global self-concept is again the varying definitions of the general self-concept. Marsh and Shavelson (1985; see also Marsh et al., 1992) described common definitions of self-concept when referring to this global construct. They describe the agglomerate use of self-concept as the most common, vaguely defined construct with little rationale for the items used to measure it. Essentially, items representing various aspects of self-concept are represented and combined into one overall score, which may result in contradictory and inappropriate findings when used as a research measure. Another definition of global self-concept or method for its measurement is that of a uni-dimensional esteem scale, which evaluate inferences about general self-worth or competence (Marsh et al., 1992). The idea of a weighted-average general self-concept, another version of the general self-concept outlined by Marsh and Shavelson (1985) is similar to ideas proposed by William James (1892/1963), who asserted that lack of skill in areas one regards as unimportant have little negative impact on feelings of general self-worth. Therefore, people give different weight to areas of self-concept which are important to them. However, research utilizing this view of self-concept has yielded non-significant results when global self-concept or esteem is compared to weighted specific areas of self-concept (Marsh, 1986). Harter (1986) also based research on

James's notion of pretensions and actual abilities, and found that self-concept and importance of specific areas was significantly related to one's level of esteem. Specifically, children with an overall positive self-concept weighted areas of high competence as very important, and areas of low competence as less important (Harter, 1986). An additional area of study relating to understanding the constructs of self-concept is that of the discrepancy model (Marsh et al., 1992), based on the idea of real versus ideal selves which, as mentioned, dates back to early examination of the self-concept by William James. Relatively recent research dealing with the discrepancy model approach to the construct of general self-concept was completed by Higgins (1987). Higgins examined actual, ideal, and ought selves through both self-report and report of others, and found that discrepancy scores were associated with various self-beliefs and emotional states, such as disappointment, fear, or sadness.

The Development of Children's Self-Concept

Many theoretical discussions of self-concept and its development in young children have centered on presence of global and/or specific facets of self-concept, and the age at which understanding and expression of either form of self-concept develops. Regarding the identification of self-concept and esteem in very young children, Harter and Pike (1984a; see also Harter, 1982) have suggested that children younger than approximately eight years of age are unable to express a general self-concept, but that specific dimensions of self-concept (such as competence and acceptance) are distinguished and able to be expressed by young children. Marshall (1989) noted that as children get older, self-concept is increasingly differentiated into various domains, such as social versus cognitive self-concept. Likewise Shavelson et al. (1976) noted that as children develop, specific facets of self-concept are later further distinguished from one another, such as the process wherein academic self-concept is later differentiated into evaluations concerning one's math or verbal skills. This is in contrast to previous research by Coopersmith (1967) who argued that pre-adolescent children made inadequate distinctions of their worthiness or performance in specific areas. Harter's view that young children do not have a global self-concept was also criticized by Marsh et al., (1991) as inadequately supported. Later research conducted by Marsh et al. (1991) sought to clarify the contradictory results found by researchers such as Coopersmith and Harter. Their research yielded results supporting the hierarchical model of self-concept, encompassing both an overall or global self-concept as well as specific areas of self-concept, and that children as young as five years of age are able to comprehend and express both overall and multifaceted forms of self-concept.

Others have noted that while the development of self-concept and understanding of various components of self-concept, such as academic or social competence, appears to become better developed with increasing age, different methods of assessment may play a role in children's realizations of expressions of self-awareness (Stipek & Mac Iver, 1989). As noted by Marsh et al. (1991), research suggests that dimensions or differentiation of self-concept in young children are attributable both to individual differences in cognitive development, as well as the appropriateness and effectiveness of evaluation instruments used to investigate self-concept. In their review of pertinent literature, Stipek and Mac Iver (1989) also conclude that children's evaluative ability is determined by their cognitive development and their interaction with the environment. The use of more appropriate assessment procedures and continued development of more multidimensional measurement tools has, therefore, been suggested as a way to advance self concept research with young children (Marsh et al., 1991).

According to Harter (1996a), the study of self-concept in children has begun to shift from a focus on the content of self-descriptions to the organizational structure of the self-concept. Furthermore, discontinuous views of the self-concept of children as developing in distinct stages has led to a more recently accepted framework wherein development of the self-concept is seen as a continuous transition (Harter, 1996a). The development of self-concept has been described as a continuous process, in which the view of the self is comprised of gradual transitions in one's ability to both perceive and describe one's own characteristics (Harter, 1996a). It is also a circular process, in which a child's perceived competence affects their approach to situations and self-perceptions of control over events (Marshall, 1989). Self-descriptions have been determined to follow a similar developmental course as that of being able to describe others (Oosterwegel & Oppenheimer, 1993). Damon and Hart (1988) further elaborate on this topic in their description of the development of self-understanding, noting that developmental changes in description of physical characteristics, activity descriptors, psychological descriptors, and social descriptors are each modified throughout development in a continuous manner. However, differing opinions of whether young children are able to comprehend and express an overall self-concept (Coopersmith, 1967), or are only able to identify and express specific facets of self-concept (Harter, 1982; Harter & Pike, 1984a) are still debated.

The first stage of self-awareness occurs during the toddler years. Research in this area relies on evidence of the development of self-awareness as children display mirror self-recognition, and then with later self-awareness when watching themselves on a television screen at approximately three to four years of age (Povinelli, Landau, & Perilloux, 1996). Preschool-aged children typically define themselves in terms of their behavior, preferences, and possessions, or what is able to be observed by others, and tend to be dichotomous (all positive or all negative) in those descriptions (Harter, 1996a). Based on work completed by Fischer (1980), Harter's (1996a; see also Harter, 1983) proposal for the development of self-concept following basic self-recognition begins with the singular representations of three and four-year-old children. They offer basic, descriptive characteristics of their preferences, possessions, and skills. Additional research has found that three to five-year-old children exhibit and express self-concepts (Eder, 1989).

Slightly older children, aged five and six, are able to provide more advanced representations of the self, although such self-descriptions are still basically dichotomous descriptions of characteristics a child exhibits that are entirely positive or entirely negative (Harter, 1996a). For example, an early study in this area found that young children conceded the presence of, but could not explain, the existence of dichotomous characteristics within the self (specifically "nice" and "mean") (Hand, 1981). Selman (1980) also found that young children are unable to conceive having contradictory attributes at the same time, and confuse overt actions and inner attitudes.

Children from the ages of five to seven are in a particular state of developmental transition, with their self-descriptions moving from concrete and observable characteristics and behaviors to using higher-order generalizations to describe themselves (Harter, 1996a). Lastly, at around seven and eight years of age children are able to self-evaluate and describe both the positive and negative aspects of their skills and characteristics at the same time. This is similar to the process of self-concept development outlined by Gesell and Ilg (1946). As children’s verbal and cognitive abilities continue to develop with age, such as near the ages of approximately ages seven to eight, children’s self-descriptions are less dichotomous and make greater use of trait labels and verbalizations to describe more subtle characteristics and self-affects (Harter, 1996a).

Changes also occur in the young child’s positive and negative self-descriptions. Young children have been noted to overestimate their abilities or characteristics, generally describing themselves in an overly positive or optimistic manner (Harter, 1988; Stipek, 1984). Harter (1988) describes such exaggerations as normative distortion, as children at this age are not intentionally trying to deceive others with their self descriptions. As relating to young children, preschool children have been found to have higher expectations concerning their task performance than do older children, and do not use feedback to modify their expectations for success (Parsons & Ruble, 1977). Other research has, however, found that young children may modify their self-expectations when previous failures are emphasized (Stipek, 1984). Glick and Zigler (1985) report that older children displayed a greater discrepancy between their real and ideal self-concepts than did younger children. For the most part, however, research has typically found that young children are more likely to overestimate their competencies, be more obvious in expressing such estimations to others, and to become increasingly accurate in their self-evaluations as they develop (Hatch, 1994; Stipek, 1984). Additionally, children who have moved through the early school transition period have been described as more accurate or balanced in their self-portraits, and identify both their positive and negative attributes (Harter, 1996a). Differences in the ability to self-evaluate are not only due to changes in their understanding of the self, but also due to developmental differences in the vocabulary of self-descriptions and trait labels (Harter, 1996a). They have difficulty in articulating the differences between their actual selves and their "ideal" selves, and therefore offer self-evaluations in which they describe themselves as a blend of how they actually are and how they would like to be, with a tendency towards overestimation (Harter, 1996a).

Some researchers have noted that it is not until later in childhood that children are able to develop and verbalize their self-descriptions (Harter & Pike, 1984a). It therefore follows that the better developed a child's verbalization skills and self-awareness becomes, the better able they will be able to express their emotions. For instance, complex emotional reactions involve self-awareness, perceptions of others judgements, and past experiences (Denham, 1998). A younger child will have less expertise in each area, and therefore will not likely experience the full range of a particular emotional experience as would an older child or an adult. Self-other agreement, or the similarity in children's perceptions of themselves and others' perceptions of them further validates research on the difficulty children have in differentiating their real and ideal selves. Children have been found to rate themselves similarly as parents and teachers in specific areas of self-concept (Marsh & Craven, 1991). Self-promotion is commonly seen in young children, as they are often eager to express their skills. Furthermore, young children have been found to be less likely to experience feelings of dissonance when making obvious over-estimations and self-promotions of their abilities than are adults (Hatch, 1994).

Harter (1996a) further notes that the lack of verbalization of self-esteem does not mean that it is absent for young children, but that such beliefs about self-worth are manifested through their behaviors rather than through verbalizations. Even toddlers are able to express self-awareness and an understanding of other's standards and expectations given their expression of apologies and distress in situations of perceived wrong doing (Kochanska, Casey, & Fukumoto, 1995). Additionally, younger children may experience more overt behavioral reactions to negative feelings of self-awareness (Denham, 1998). They may act out in a negative manner, attempt to correct the situation in a manner they perceive as appropriate, or even attempt to help others in similar situations as they develop basic empathic feelings and a better understanding of expressing their self-esteem and competencies (Denham, 1998).

Assessment of Children's Self-Concept

As with many areas of research relating to young children, the initial study of self-concept relied upon downward extensions of both theoretical models and measurement instruments intended for older children, adolescents, or adults. Furthermore, the use of varied definitions and evaluation of different domains of self-concept has also contributed to difficulties in self-concept research (Marshall, 1989). Young children's difficulties in articulating their self-perceptions also pose challenges to researchers (Harter & Pike, 1984a; Wylie, 1989). The increased acknowledgement of the multidimensional perspective of children's self-concepts, and the encouragement of the study of such dimensions as well as that of global self-concept in young children has led to the development of more appropriate instruments based on stronger theoretical models (Marsh et al., 1991). However, Wylie (1989) noted that the continued problems of vague theoretical bases of much self-concept research contribute to the difficulties in the establishment and evaluation of psychometric adequacy of various self-concept measures. The lack of appropriate and/or adequate measurement instruments has also been implicated as an important deficiency of self-concept research (Marsh et al., 1992). As stated by Keith and Bracken (1996), "the proliferation of questionable procedures such as the semantic differential, Q-Sort, and other projective and construction tasks have contributed to the vast array of equivocal findings in the self-concept literature" (p. 93). This is particularly problematic for the study of self-concept in young children, where available assessment instruments are very limited (Wylie, 1989).

Harter (1983) noted several issues important in examining methods of assessing children's self-concept, self-esteem, and perceived competence. These include scale construction, consideration of global or differentiated constructs, developmental differences, correlates, stability, and antecedents of self-perceptions.

Consideration must also be given to the method of assessment used. Past research has used various methods including adjective checklists, Q-sort tasks, projective tasks such as human figure drawings, third-party reports, and various questionnaires (Keith & Bracken, 1996). In the assessment of young children, third-party reports and questionnaires are frequently used, given the difficulties young children are presumed to have in verbalizing their self-concepts (Wylie, 1989). For instance, teachers and parents are often called upon to observe describe children's self-concepts based upon observable characteristics and behaviors.

To address problems in evaluating the self-concept of young children, Wylie (1989) has identified what are considered to be the two most appropriate and effective self-concept evaluation instruments for young children. These include the Joseph Pre-School and Primary Self-Concept Screening Test (Joseph, 1979) and the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter & Pike, 1984a, 1984b). The Joseph (1979) scale provides a method to examine young children's global self-concept (Marsh et al., 1991), while the Harter and Pike scale (1984a) was designed to measure more specific areas of self-concept (physical and cognitive competence, and social and maternal acceptance). The Harter and Pike scale has been used extensively in research on the self-concept and perceived competence, and has consequently had its reliability and validity investigated much more thoroughly. Given the availability of this reliability and validity data, at the present time, it is still likely the most appropriate measure of young children's self-concept in specific domains. The Joseph scale, while mentioned on occasion in research literature (Keith & Bracken, 1996; Marsh et al., 1991; Wylie, 1989), has received little study (Wylie, 1989). Both scales, however, have been cited as being essentially the only alternatives to the formal study of self-concept in young children (Wylie, 1989), and have attempted to utilize pictorial, age-appropriate formats to enhance their psychometric properties (Harter & Pike, 1984a; Joseph, 1979; Wylie, 1989).

More recently, Marsh et al., (1991) have proposed the use of the Self-Description Questionnaire (SDQ) with younger children through the use of modified administration procedures. Their research indicated that both an overall or global self-concept rating, as well as ratings regarding specific domains of self-concept, could be validly and reliably obtained from children as young as five years of age. The major modification to the SDQ, a self-report questionnaire for children ages 7 to 13 years based upon the hierarchical model of self-concept development proposed by Shavelson et al. (1976), was to instead administer the scale individually to each child using only positively-worded items. While successful in this study, later research has shown that despite the relatively good psychometric properties of scale when modified for use with young children, the test is too lengthy and repetitive for use with young children (Davis, 1993).

Perceived Competence

Background

The term perceived competence seems to be frequently thought of as interchangeable with the term self-concept, adding to the previously described difficulties in understanding and researching each area. However, some researchers view perceived competence as a sub-category of self-concept, encompassing beliefs about one's ability to be effective and successful in particular tasks (Marshall, 1989). Oosterwegel and Oppenheimer (1993) refer to perceived self-concept as "intraindividual self-concepts perceived from the perspective of others, that is, how children think that others perceive them or would like them to be" (p. 38). The study of perceived competence has received increased interest in recent years, likely influenced by a resurgence of interest in individual differences in children’s development and the need to account for cognitive, social, or physical differences within developmentally appropriate education services.

Perceived competence is not a narrowly defined concept, but one that has both varied meanings and several components. Research on self-concept points to a gradual process in which young children become increasingly able to make accurate negative evaluations of themselves (e.g., Harter, 1996a; Parsons & Ruble, 1977; Stipek, 1984). Young children have also been shown to adjust their self-expectations when past performance (specifically failure) is emphasized to them (Stipek, 1984). Furthermore, at the same time children are becoming increasingly aware that others are observing and evaluating them, and they consequently become more concerned about others’ views of them (Harter, 1996a). During early elementary years, children become increasingly concerned about public criticism and the views of peers and significant others. Lewis (1993) noted that individual differences in self-awareness and emotional expression are combinations of both cognitive processes (including basic cognitive abilities and self-awareness) and socialization experiences (both cultural and individual). Social interaction with others provides children with experience in feeling and expressing self-aware and social emotions (Denham, 1998). Relating to their understanding of competence, children may receive appropriate, inappropriate, or ambiguous feedback concerning their actual levels of development in various areas, and such evaluations likely influence a child's development of internal beliefs as to their own competence (Gullo & Ambrose, 1987). Gradually children begin to incorporate others' views of themselves into their own self-concept, and their self-perceptions begin to mirror the perceptions others have of them and the reactions others have to them, similar to theory proposed by Cooley (1902/1968). The standards and expectations of others become a yardstick with which to measure one's worth and skills (Harter, 1996a).

Research on Perceived Competence

Children are aware of and may demonstrate competent behavior in every developmental area. Feelings of competence have been found to be significantly related to positive feelings toward the self (Verschueren et al., 1996). Among those most studied and assessed in everyday situations are social competence, academic or cognitive competence, and physical competence.

A major component of research concerning children's perceptions of competence in various areas is that of self-perceptions of specific abilities or skills, and associations between perceived and actual competence. While much research has been conducted regarding school-age children's perceived competence, it was not until the late 1970's and early 1980's that the limited knowledge of such characteristics in younger children was addressed (Anderson & Adams, 1985). Harter's work in this area led to the development of evaluation instruments for assessing the perceived competence of young children, including domains of social competence/acceptance, physical/athletic competence, and cognitive/scholastic competence (Harter & Pike, 1984a).

It is widely believed that children within the pre-operational stage of development are likely to exaggerate their own levels of competence when asked to evaluate themselves (Anderson & Adams, 1985, Harter & Pike, 1984a). While exaggerated self-perceptions of ability or achievement are seen during childhood (i.e., Harter, 1996a; Marshall, 1989), young children's difficulty with subtly exaggerating their self-perceptions might lead to the tendency to believe that children are more apt to make more bold overestimations (Anderson & Adams, 1985).

Anderson and Adams (1985) noted that only a limited number of studies have examined relationships between self-perceived competence and actual ability levels or achievement, and those that have examined such relationships have found only slight, and often insignificant, links. For instance, conflicting research findings have shown that children's ratings of their own ability are not related to teacher ratings of ability until approximately the second or third grade (Stipek, 1981). Others have found significant associations between self-ratings and other's ratings in children as young as five years of age (Harter & Pike, 1984a). However, such correlations, while statistically significant, have been of only modest levels.

A major concern in the study of children's self-perceptions of competence in various areas is whether children have the cognitive ability to evaluate their own abilities and skills accurately (Anderson & Adams, 1985). Evans and Roberts (1987) note that social comparison processes typically emerge between the ages of five and seven, at which point children are relatively accurate in their ability to compare and judge the skill levels of peers. However, it is not until later in childhood that children are able to use such comparison processes to determine their own relative abilities. Furthermore, issues relating to children's ability to discriminate between specific sub-areas of competence, such as between the physical and cognitive domains have also been disputed (Anderson & Adams, 1985; Harter & Pike, 1984a).

Despite conflicting findings, some evidence does suggest that children are accurate in their self-evaluation abilities at very young ages. For instance, an early study determined that four-year-old children were not prevented from self-criticism due to an egocentric level of development when asked to rate their abilities in various areas (Weiner, 1964). Furthermore, children as young as three years of age display mature evaluation skills in evaluating peers, although they are less likely to evaluate their own skills in such a manner at that age (Stipek & Hoffman, 1980). More recently, research conducted by Simonson and Strein (1997) suggested that kindergarten students may be relatively accurate in their self-perceptions of academic skills.

Research relating to self-perceptions of competence and assessment of competence in young children reported by Harter and Pike (1984a) indicates that young children do not find themselves to be equally skilled in all domains assessed. This finding provides some evidence that children are able to discriminate between their self-perceptions of ability in various developmental areas. Results suggesting that very young children are able to discriminate between areas of self-evaluation may be influenced by the assessment method used. For instance, Harter's scales for young children utilize developmentally appropriate methods incorporating pictures to facilitate understanding of assessment questions (Harter & Pike, 1984a).

A frequent criticism of research relating to children's self-perceptions of ability and skills is that assessments have typically relied upon teacher ratings of children's achievement or skills, as opposed to direct measurement of children's actual levels of competence at the time such assessments are conducted. For instance, Stipek (1981) has shown that children inaccurately perceive their competence when compared to teacher ratings of their competence; however, children's actual abilities were not assessed. Teachers may assume that young children are able to understand and use critical feedback in modification of future behaviors related to academics and learning, but such relationships are not clear (Gullo & Ambrose, 1987). In an effort to investigate the reliability of teacher ratings, later research has included direct assessments of children's competence in various areas as well as frequently used measures of children's self-perceptions of competence (Anderson & Adams, 1985).

Perceived Academic Competence and Achievement

Parents, teachers, and peers provide children with feedback about their achievement. Denham (1998) noted that it is the interaction surrounding such experiences that provides children with insight into the emotional meaning of everyday events and accomplishments, as well as ways to determine how they should feel in a given situation. A limited number of studies have specifically examined the questions of children's self-perceptions of competence in the areas of cognitive or physical skills, or both, and actual levels of competence. In a study by Anderson and Adams (1985), results indicated moderate but significant relationships between five-year-old children's perceived cognitive competence as measured using Harter and Pike's Pictorial Scale of Perceived Competence and Social Acceptance (1984a) and academic achievement (as measured using the Woodcock-Johnson Psycho-Educational Battery; Woodcock & Woodcock, 1977). Such results provide further evidence and clarification that young children are able to make accurate self-evaluations of their academic achievement. Additionally, in contrast to Harter and Pike's (1984a) assertion that young children are unable to distinguish between the cognitive and physical domains relating to perceived competence (for example, believing that if they can run fast, they can read fast, too), Anderson and Adams found that perceived physical competence, as assessed by the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter & Pike, 1984a) was found to correlate significantly with only one of the three academic measures competed using the Woodcock-Johnson Battery. Therefore, this provided more information but still inconclusive findings as to whether or not children are actually able to discriminate between their perceptions of cognitive and physical skills. Other findings of this study determined that perceived social acceptance was not associated with academic skill, and sex and age differences were not found relating to self-perceptions of competence.

The Anderson and Adams (1985) study, as well as another study examining relationships between three-year-old children's perceived competence and actual abilities (Stipek & Hoffman, 1980) were later criticized by Gullo and Ambrose (1987). Gullo and Ambrose proposed that because Anderson and Adams (1985) found significant differences between perceived and actual competence through the analysis of a heterogeneous group of preschool and kindergarten children from two differing educational settings, the factor of setting may have contributed to the significant variance. Additionally, while a significant difference was found between the kindergarten and preschool children's ratings of cognitive competence, no attempt to control for this difference was incorporated into the combined-group correlational analyses completed. Gullo and Ambrose suggest that the within-group variance for preschoolers and kindergartners could have affected the results, leading to a very low correlation being required to yield significant findings. Furthermore, they noted that previous research may have been confounded by the use of teacher ratings of children's competence rather than actual objective measures of such competence. In attempting to rectify these shortcomings, Gullo and Ambrose (1987) found that kindergarten children's actual level of academic achievement, as assessed using the Metropolitan Readiness Test was not related to their self-perceived competence and social acceptance on the Harter and Pike scale.

Associations between perceived competence, self-concept, and achievement lead to questions about both perceived competence and actual competence, as well as the possible influences of grade level and success in school on perceived competence and self-concept. As young children already experience tremendous changes and adjustments during early childhood and the first years of school, difficulties they may encounter could contribute to negative affects on their development of self-concept. Also, such difficulties may have a significant influence on their perceived competence. The following section discusses two common methods used as interventions for children having academic, social, or behavioral difficulties in kindergarten: retention and transition-grade programs. Research on the influence of retention or transitional placements on both self-concept and perceived competence in specific areas also is examined.

Kindergarten Retention and Transitional First-Grade Programs

Background

The issue of retaining students has been controversial for some time, with arguments both for and against such practice. As stated by Karweit and Wasik (1992), "how to best provide an appropriate learning environment for kindergarten aged children who are 'not ready' to begin school is a perennial issue faced by schools and parents" (p. 1). The actual practice of retention appears to be widespread, although many studies have determined that having students repeat grades does not lead to significant improvements in various aspects of student outcome. As noted by Peterson, DeGracie, and Ayabe (1987), research in this area has failed to provide evidence that retaining students is beneficial, although retention rates are rising and issues such as social promotion are currently facing public scrutiny. The use of retention and transition-grade programs is supported by those who view more time and practice as ways to solve the problem of young children’s academic difficulties. For example, when discussing developmental placement and readiness, Ilg, Ames, Haines, and Gillespie (1978) advocated a two-level kindergarten and pre-first grade for children who are not yet ready to advance to first grade (1978). Retention and transitional programs are based on the underlying assumption that children will, if provided with an additional year of school experience, attain the skills, developmental level, and maturity to successfully function in the first grade (Mantzicopoulos & Morrison, 1990).

Proponents of grade retention often suggest that children who are not developmentally ready or mature enough to move on to the first grade should remain in kindergarten or a transitional program to allow time for maturational processes to unfold. Theories of child development proposed by Gesell, and the use of Gesell assessment methods and programming provided by the Gesell Institute have been major influences on the use of developmental status as a placement criteria for children (Karweit & Wasik, 1992; Mantzicopoulos & Morrison, 1990; Meisels, 1987; Shepard & Smith, 1986). School districts and personnel following the view proposed by the Gesell Institute typically define school readiness in terms of developmental age, as opposed to chronological age, and emphasize that children's development follows an individualized timetable with some children requiring additional time to achieve such readiness (Karweit & Wasik, 1992).

As children are likely more often retained during the earliest years of school, the effect of retention on young children's social, academic, and psychological development is an important topic to consider. It has also been proposed by those disagreeing with the concept of school readiness that schools should be ready for children, rather than requiring children to be ready for school (Karweit & Wasik, 1992).

Issues related to the various forms of retention affect those working with children in many disciplines, not just teaching. For instance, the National Association of School Psychologists (NASP) has published statements regarding retention and addressing the factors relating to and effects of such practices. In a significant change from their more moderate position statement published in 1988, NASP (1998) now asserts that retention serves to punish the child who is actually a victim of poor classroom instruction, noting that research shows that children who are retained do not benefit academically later in school.

Transitional classes, sometimes termed pre-first grade, are intended to provide children who are regarded as "not yet ready" to progress to the first grade with an appropriate educational placement (Dennebaum & Kulberg, 1994). The transitional first grade, also called "pre-first grade" or "junior first grade", and various forms of developmental or two-year kindergarten programs are often advocated by those in favor of instituting such developmental placements in elementary schools (Ilg et al., 1978). According to Elkind (1987), "such programs were instituted to avoid the stigma of a child's repeating kindergarten while at the same time moving the child a step nearer to being ready for first grade" (p. 175). Such programs combine the developmental perspective of allowing children additional time to mature with the implementation of an adjusted curriculum. As noted by Carll and Richard (1977), pre-first grade attempts to give children additional time to develop, additional experiences, and unconditional acceptance.

Transitional first-grade programs are at times remedial in nature, while in other cases are viewed and implemented as an intervention (Karweit & Wasik, 1992). As the end of the school year draws near, children who are regarded by teaches, related school personnel, or parents as not being ready for promotion to the first grade are sometimes recommended for placement in a transitional-grade program. Developmental testing, such as with the much debated Gesell Tests of School Readiness (Ilg et al., 1978; Meisels, 1987) are also frequently used to determine such placements. Such programs give rise to many issues similar to those considered in the area of grade retention. For example, transition programs have been criticized as being merely a repetition of kindergarten material, rather than a more advanced curriculum with an emphasis on special instruction in problematic areas (Zill, Loomis, & West, 1997).

Readiness is the term often used to describe a child's ability and skill in meeting the demands of formal schooling, including social, behavioral, and academic expectations. As described by Karweit and Wasik (1992), a child who is unready for school may display characteristics of behavioral and academic immaturity such as impulsiveness, inattentiveness, limited social-emotional adjustment, and a lack of basic skill acquisition. School readiness is noted to be situationally rather than universally or uniformly defined (Karweit & Wasik, 1992). Children who are viewed as not ready to meet the expectations of kindergarten are usually recommended for or retained in kindergarten for an additional year, or placed in a transitional-grade between kindergarten and first grade (Dennebaum & Kulberg, 1994). Retention during early elementary school has the obvious appearance of being less detrimental than retention later in school. It is also viewed as a method to aid children who are not prepared due to the accelerating demands of today's kindergarten and first grade programs (Shepard & Smith, 1988).

Several student characteristics have been found to be associated with grade retention. For instance, in the 1993 and 1995 National Household Education Surveys, information obtained regarding kindergarten retention and transitional kindergarten programs indicates that boys are more likely than girls to be retained in kindergarten, as are children who display various developmental delays (Zill et al., 1997). Wang and Whitcomb (1997) recently determined that being young, male, and Hispanic-American were associated with transition-grade placement in their study of Texas schools. Children who are retained are more likely to display increased levels of attention difficulties and overactivity, visual-motor difficulties, and lower overall levels of intellectual ability (Mantzicopoulos, Morrison, Hinshaw, & Carte, 1989). Recent data also indicated that children who begin kindergarten at a relatively younger age than same-grade peers are also more likely to be retained in kindergarten (Mantzicopoulos et al., 1989). Ethnic group membership is an associated factor, with more African American or Hispanic children being retained than non-Hispanic Caucasian children (Zill et al., 1997). Social and socioeconomic factors also found to be associated with kindergarten grade retention include parental education level, economic status, family composition, as well as health issues such as low birth weight (Byrd & Weitzman, 1994; Mantzicopoulos et al., 1989; Zill et al., 1997). From such associations, it can be seen that there are many more factors associated with retaining children in kindergarten than merely their acquisition of basic skills and successful first school experiences. An additional factor to consider is that children who are boys, are relatively younger, and are Caucasian are more likely to have their entry into kindergarten delayed for a year, which may provide them with additional time for learning and maturation, allow them to be better prepared for the demands of kindergarten, and subsequently contribute to the increasing expectations and standards of kindergarten programs. Such increased expectations have a direct influence on children who are unable to keep up with the escalating academic demands of the early school years, and may subsequently face retention (Shepard & Smith, 1988).

Arguments and Evidence Against Retention and Transitional Programs

Several arguments have been proposed against the practice of kindergarten retention and transitional-grade programs, and therefore against practice of giving children more time to improve their level of readiness. Critics of such practices argue that children will only fall more behind if given additional time to mature, and cite the ineffectiveness of retention and transition-grade programs in remediating academic and behavioral differences between children (Karweit & Wasik, 1992; Shepard & Smith, 1987). Additionally, the fluid development during the early-childhood and elementary school years can lead to rapid changes in various areas of children's social, intellectual, and physical abilities, contributing to difficulties with accurate assessment (Zill et al., 1997).

Unintended or iatrogenic effects of retention and transition programs include economic burdens, escalating academic demands, and increased dropout rates later in school (Meisels, 1992). The social stigma and possible influence of retention on a child's self-concept can also have a negative impact on children (Shepard & Smith, 1989). Corroborating with the research literature, Thomas et al. (1992) concluded that kindergarten and first grade children do not benefit from retention in the areas of academic skills or social functioning. Beyond not benefiting from retention (e.g., Shepard & Smith, 1987), retained children appear to display significantly more internalizing problems as rated by teachers, suggesting that retention can lead to adverse effects (Thomas et al., 1992). Holmes (1989) conducted a meta-analysis on retention studies and concluded that the research did not support retention as a positive or beneficial procedure. In fact, Holmes (1989) determined that children who had been retained were negatively affected in both personal adjustment and academic performance.

Research on transitional first-grade programs has also shown that an additional year of school between kindergarten and first grade does not provide substantial benefits to children (Boettger, 1994). Additional factors felt to encourage the use of transition-grade programs include the emphasis placed on standardized test scores. For example, Wortham and Patton (1992) report that transitional programs were introduced in Texas as a way to raise district test scores. This was carried out by placing potentially low scoring children in a transitional class where they were not required to take such tests, as opposed to a regular first-grade classroom placement where children were required to complete standardized testing. Additionally, the curriculum and expectations of transitional first grade programs vary (Wortham & Patton, 1992), and may contribute to some children receiving more developmentally appropriate remediation while others may merely receive a repeat of the material previously taught during kindergarten. Furthermore, transitional programs may not have procedures in place for reassessing children who were placed in transitional programs, so progress they may make and the continued appropriateness of such a placement may be questionable (Wortham & Patton, 1992).

Children who have been retained in kindergarten or participated in a transition program are not necessarily benefiting from such experiences when later academic performance is examined. The general consensus from reviews of research literature have determined that, in general, retention or transition programs do not provide children with academic benefit above those of children who may have been at risk but were not retained (Meisels, 1992; Nason, 1991). Research also has shown that reading and math achievement, as well as the presence of various behavior problems, during the first and second grades were not significantly different for academically at-risk children who had been retained in kindergarten and those who had been promoted (Mantzicopoulos & Morrison, 1992). Likewise, Shepard and Smith (1987) found no significant differences between children who had been retained in kindergarten and those who had been promoted to first grade in the areas of reading and math achievement, social skills, self-concept, and attention, and conclude that an extra year of kindergarten is not effective. Information provided by parents did, however, note that children who had been retained displayed a more negative attitude toward school than children who were identified as at-risk but still promoted (Shepard & Smith, 1987). As was the case in these studies, additional research has shown that children who were retained did not obtain significantly different scores in the areas of verbal intellectual ability and academic achievement when compared to non-retained peers, but performed significantly less well in the areas of performance ability and personal/social adjustment (Niklason, 1984).

In a study examining the effects of kindergarten retention, transition-grade placement, children recommended for retention or transition grade but continued on to first grade, and those who were regularly promoted results indicated that children who had been retained displayed the lowest academic achievement as assessed with standardized tests. Children who were recommended to be retained or placed in transition classes but were not held back displayed similar academic achievement through the third grade as did children who were promoted under typical circumstances (Dennebaum & Kulberg, 1994). It was concluded that the extra year of school provided by the transition-grade program or kindergarten retention was not of significant benefit (Dennebaum & Kulberg, 1994). The developmentally appropriate practice of designing a flexible kindergarten curriculum and allowing for individual differences in learning and maturation during early childhood is also a policy which by definition conflicts with the encouragement of kindergarten retention or the essential retention provided by transition-grade programs (Kagan, 1990).

Transition-grade programs have not been found to contribute to equalization of achievement between children. Gredler (1984) reviewed studies concerning the achievement of children placed in transition-grade programs, and noted no positive gains are usually found, and when such gains are made, the benefits of transition-grade participation typically fade over time. In a review of research on the effectiveness of transitional programs, Karweit and Wasik (1992) conclude that students who participated in transitional programs generally did not obtain any significant academic benefits. In cases where children from transitional first-grade programs did display higher achievement than their first-grade peers, such effects soon faded (Karweit & Wasik, 1992). Therefore, they conclude that transitional first-grade programs do not evidence long-term effectiveness. In a 1991 study, Ferguson determined that no significant differences exist in academic skills and behavior between children who were placed in a transitional-grade class and those who were recommended but were not placed.

The methods for determining which children may benefit from being retained or being placed in a transition-grade class have also been criticized. Specifically, the Gesell School Readiness Screening Test is frequently used for determining the placement of children in transition-grade classes (Meisels, 1987; Shepard & Smith, 1986). This assessment instrument is based on the previously described construct that a child will not be able to successfully participate in a formal school program until they are maturationally ready to do so. It emphasizes the use of developmental age as opposed to chronological age in comparing children and determining their school readiness. The Gesell Institute (1987) defends the use of their assessments, stating that "the Gesell School Readiness Screening Test, as a reflection of this philosophy, is a valuable tool for recognizing the forces of maturity in our individual students and thus is an effective means to enhance developmentally appropriate education" (p. 8). Critics of such practices do not agree, however, and note that various developmental screenings and readiness tests are frequently misused (Meisels, 1987). Furthermore, it has been stated that their use in the identification and placement of children in retention programs is unwarranted (Meisels, 1987).

Arguments For Retention and Transition-Grade Programs

Transition programs have been described as a "programmatic strategy for dealing with the mis-match between children and first grade curricula..." (Elkind, 1987, p. 175). They are further described as a method to avoid negative stigma of retention while providing children with additional time to prepare for the first grade (Elkind, 1987). At the time of their 1992 review, Wortham and Patton noted that the use of transition-grade programs as an intervention for students deemed unready to progress to the next grade appears to be growing. Retention may also be more favorably viewed and on the increase due to promotion requirements that are based on results of standardized testing and expectations of all children to meet numerous skill requirements (Thomas et al., 1992). One study presenting some benefits of early grade retention noted that children retained in first through fourth grade showed significant improvements in various academic areas (Pomplun, 1988). In a longitudinal study proposing that early grade retention can benefit students, Alexander, Entwisle, and Dauber (1994) found that the academic performance of children retained in elementary school improved upon repeating a grade, and continues to improve during elementary school. Peterson et al. (1987) reported that children retained in second and third grade experience more lasting benefits of retention. Other arguments in favor of the implementation of transition-grade programs cite the fact that children are able to avoid the social stigma of retention in kindergarten while gaining skills to better prepare them for the first grade (Dennebaum & Kulberg, 1994). Furthermore, proponents of retention often argue that retention during the early grades is more beneficial and useful (Thomas et al., 1992).

Self-Esteem/Self-Concept and Retention

Research involving the study of grade retention and self-concept has shown that improvement in academic achievement does not typically occur, and that retention is associated with negative self-concept (Dennebaum & Kulberg, 1994). Parents have reported that children who had been retained indicated being teased by peers, and were noted to display a sense of failure (Shepard & Smith, 1989). Retained children have also been found to perceive themselves as failing, and to experience feelings of disappointment associated with such failure (Niklason, 1984). As described by Niklason (1984), "the stress and disappointment associated with failure, the monetary cost of another year of school, and the extra year of schooling in the child's life are substantial costs" (p. 496). As with retention, participation in a transitional first-grade program has also been shown not to enhance the self-concept of academic ability later in school (Boettger, 1994). Additional research has shown that children who were retained during kindergarten or early elementary school display lower self-esteem and more negative self-concepts during later grades (Setencich, 1994). Even in research noting some possible benefits of retention when academic skills are considered, self-concept diminished in students retained in third and fourth grade (Pomplun, 1988). In contrast to such findings, Alexander et al. (1994) determined that the academic self-esteem of children retained in elementary school was not negatively affected. Busta (1990) noted that children who participated in a transitional-first grade class were rated by their teachers as high in academic achievement and self-confidence in first and second grade. However, the majority of research on the associations between retention and children's self-concept have concluded negative associations between them. As summarized in the Current Practice and Research Evidence article on retention (1990), children view retention as a form of punishment, and major education orgainizations frequently express a need for reform of practices such as kindergarten retention. The National Association of School Psychologists also view retention is a form of punishing children for failed educational programs (1998).

Similar findings have been shown in the area of transition-grade programs. In an early study, Bell (1972, as cited in Gredler, 1984 and Shepard & Smith, 1988) found that children who participated in a transitional first-grade program displayed significantly lower levels of self-concept than did same-age peers promoted to the first grade. Children in transitional classes are felt to be aware of the fact that they were not eligible to continue to the first grade (Elkind, 1987), and are aware that they have not made similar progress as have same-age peers (Shepard & Smith, 1988). Furthermore, using a different name for such programs does not disguise the meaning of such classes for young children (Shepard & Smith, 1988). In summary, the limited research on the self-concept and esteem of children who participate in transition-grade programs points to neutral to negative effects.

Summary

This review of literature has highlighted three main areas of previous research. First, it was noted that the development of self-concept in children is an area of continued research interest, with improvements in evaluation instruments and more thorough study of the developmental progression of identity development enabling self-concept to be better understood. The study of perceived competence, as a possible sub-category of self-concept dealing with perceptions of one's abilities in particular areas, is also an area of continued research interest. Several general patterns of self-concept and perceived competence have been discussed, including children's tendencies to become more abstract and less concrete in their self-descriptions with age, to become more accurate in their self-evaluations as they grow older, and to gain insight into the fact that a person may possess seemingly opposite characteristics concurrently. Lastly, the issues of kindergarten retention and transitional-first-grade programs were examined. While in most cases research does not show that such methods of intervention provide children with benefits at all, or do so for only a very limited duration, these practices continue to be widely implemented. Relating to self-concept and perceived competence, retention does not appear to enhance young children's feelings of self-worth or competence as they progress in school.

While the effects of retention and transition-grade placement have been studied as related to self-concept and perceived competence, such studies typically examine the long-term influences of forms of retention. It was the purpose of the current study to draw upon previous research in the areas of self-concept, perceived competence, and student grade retention to examine the associations between children's perceived competence and actual competence among three groups of children. These groups are kindergartners and first graders, and a group of kindergarten graduates who have experienced academic difficulties or are otherwise deemed unready to progress to the first grade, who are subsequently placed in a remedial class referred to as "pre-first" or "transitional-first" grade.

CHAPTER 3
METHODOLOGY

Participants

Participants in this study were selected from a population of elementary school students living in a north Florida school district/county. This county is a predominantly rural area of middle to lower socioeconomic status.

Participants in this study include kindergarten students, pre-first grade students, and first grade students who had been regularly promoted. Participating students attended three public elementary schools at the time of the study. At each of these elementary schools the pre-first or transitional-first grade program is currently part of the regular-education program. This transition-grade program is known as "pre-first grade" in two of the elementary schools and "transition-first" in the third school. Each of the schools views their transition-grade program as a retention program, although one school emphasizes the "transition" nature of their class as more than a repetition of kindergarten work. In each school criteria for promotion from kindergarten to first grade includes teacher assessment of basic skill acquisition as indicated by student work performance and subsequent grades. Behavior, maturational level, and related characteristics are also considered as indicators of readiness for promotion to the first grade.

In the sample for this study, children who have not attained key kindergarten skills, or those who are identified by teachers and other school personnel as developmentally not prepared to advance to the first grade are considered for placement in the school's "pre-first" grade or "transition-first" grade program. The actual curricula of the pre-first/transition-first grade classes are determined by each individual school within the district, therefore contributing to some variability in the curriculum.

Two of the schools which agreed to participate appear to view the pre-first program as a remediation of kindergarten work, with some gradual introduction to the tasks required of students in the first grade. Class sizes are typically smaller (i.e., 15-18 students) than are the regular kindergarten or first grade classes. For the purposes of later discussion, these classes will be referred to as Classes 1 and 2.

A third school views their pre-first program as an opportunity for more intensive remediation in kindergarten skills, as well as an opportunity for small-group, intensive instruction in first grade work. They refer to the program as "transitional first grade" as opposed to "pre-first grade". Students from the "transitional" program at this third school may have an opportunity to be promoted to the second grade at the end of their pre-first year, given significant gains in their skill level; otherwise, they are promoted to an actual first grade class for an additional year, as is the case with the other two elementary school programs. This program will subsequently be referred to as Class 3.

Concerning placement in the transition-grade programs, Class 3 determines eligibility for the class based on the following criteria: achievement test scores (consisting of a county kindergarten screening instrument and minimum skills requirements), the Early Childhood Assessment (from the Center for Maturational Studies), teacher anecdotal input and completion of checklists, and classroom observations. Classes 1 and 2 within this county determine eligibility through a similar process, although standardized assessments may not necessarily be used in each case.

Research Instruments

Children participating in the current study were asked to complete two research instruments. Additionally, teachers were asked to complete a checklist which is a component of one of the research instruments. They are described as follows:

The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children

Developed by Harter and Pike (1984a, 1984b), the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSA) was designed to provide an age-appropriate means of evaluating young children's perceptions of competence and acceptance in various areas. The scale also seeks to account for young children's possible difficulties in verbalizing or expressing beliefs about themselves (Harter & Pike, 1984a; Wylie, 1989). Specifically, the scale utilizes a pictorial format to ensure that children better understand and attend to the assessment items, as opposed to a questionnaire or orally-administered test. The PSPCSA examines two subscales relating to perceived competence: cognitive competence and physical competence. The scale also contains two subscales examining social acceptance: peer acceptance and maternal acceptance. While the entire scale was administered to

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students participating in the current study, for the purposes of investigating the hypotheses of interest the cognitive competence subscale will be analyzed in relation to additional variables.

Factor analysis at the time of development of the PSPCSA yielded a two-factor pattern of perceptions of general competence and perceptions of social acceptance. Reliability coefficients for the cognitive and acceptance subscales range from .66 to .89. Validity data for the scale were obtained through questioning children regarding their responses, with findings indicating that children were able to provide reasons for their perceived competencies (convergent validity). Discriminant validity data were also obtained through comparisons of children's perceived ability scores with groups of children with various characteristics, including those who had been retained (cognitive competence), children who were new to the school (peer acceptance), premature births leading to developmental lags in gross motor skill development (physical competence), and a more limited study of the validity of the maternal acceptance subscale. Predictive validity information was obtained through comparisons of children's perceived cognitive competence and their preference on behavioral tasks of varying levels of difficulty. Later studies utilizing the PSPCSA have also found the scale to be a valid and reliable measures of perceived competence in various populations of children and students (Cadieux, 1996; Diamond, 1994).

A teacher checklist, which uses many of the same questions as the child's self-report instrument, is included with the PSPCSA sale. According to Harter and Pike (1984b), the scale provides a useful way to compare children's perceptions of competence with teacher ratings of child's competence, and provides an objective measure of children's abilities. This checklist was determined by Harter and Pike (1984a) to correlate significantly with children's self-perceived competence. Furthermore, teacher and child ratings were more closely related within the same domains as opposed to cross domains, suggesting children's perceived competence ratings are associated with their actual competence as assessed by their teachers (Harter & Pike, 1984a).

The PSPCSA is comprised of two versions, one for preschool and kindergarten children (ages 4 and 5), and one for first and second grade children (ages 6 and 7). The two scales consist of two main factors (general competence and social acceptance). There is some overlap in the versions of the PSPCSA, with approximately half of the questions the same on both versions. Other questions differ in their wording and applicability to the age groups assessed. As discussed by Harter and Pike (1984a) the need for two versions was "necessitated by the fact that the specific skills that define or connote competence and social acceptance change rather dramatically within this 4-year age range" (p. 1970). For the purpose of the current study, the first/second grade version of the PSPCSA will be used, for two reasons: First, the timing of data collection will lead many subjects in kindergarten to be six years of age at the time of testing. Second, the increasingly academic nature of kindergarten, particularly the emphasis on basic early academic skill mastery by the end of the kindergarten year, points to the "more scholastically oriented skills such as being able to spell, read, or add" (Harter & Pike, 1984a, p. 1970) as likely being the most appropriate measure of cognitive competence for kindergarten, pre-first, and first grade students for the current study. Harter (personal communication, March 8, 1999) also concurred with this decision.

Woodcock-Johnson Psychoeducational Battery, Revised: Tests of Achievement

In an effort to further study the relationship between young children's perceived and actual levels of academic or cognitive competence, the Basic Skills Cluster of the Woodcock-Johnson Psychoeducational Battery, Revised: Tests of Achievement (1989) was administered. The 1989 edition is a revision of the original 1977 battery, and includes new and revised subtests and a re-normed sample (Woodcock & Johnson, 1989). The Woodcock-Johnson, Revised was normed on a randomly-selected sample of 6,359 subjects from diverse geographical areas of the United States. Subjects ranged from preschool through adults (ages 2 to greater than 90 years of age) (Woodcock & Johnson, 1989).

As a component of the larger achievement battery, the Basic Skills Cluster assesses the early academic skills typically represented in the kindergarten curriculum. The Skills Cluster is comprised of three subtests. Letter-Word Identification (subtest number 22) examines pre-reading and early letter/word identification skills. Depending upon grade level, children may be presented with initial items which use pre-reading rebuses to assess knowledge of symbol-sound relationships. They are then asked to read various letters and words. Applied Problems (subtest 25) assesses developing mathematics skills with questions highlighting concepts such as basic counting and telling time. Lastly, the Dictation subtest (subtest 26) assesses early writing skills. Depending upon grade level, children are first asked to copy various shapes and letters, or begin with basic letter writing, punctuation, and grammar items.

Standard scores (M = 100, SD = 15) are provided for each subtest (Letter/Word Identification, Applied Problems, and Dictation) as well as for the Basic Skills Cluster. Raw scores, grade equivalents, age equivalents, and percentile ranks are also provided for each subtest and cluster.

Information concerning reliability and validity was presented in the test manual (Woodcock & Johnson, 1989). Regarding reliability, the WJ-Ach manual presents average reliability data from the two forms of the test. While reliability information for each age range is presented in the Examiner's Manual, only age-relevant data will be discussed here. Split-half reliability for the Skills Cluster and relevant subtests determined by the authors yielded reported reliabilities of .96 (Subtest 22-Letter/Word Identification), .84 (Subtest 25-Applied Problems), .92 (Subtest 26-Dictation), and .97 (Skills Cluster) at the six-year-old age level (Woodcock & Johnson, 1989).

Concerning validity, the author's present evidence of content, concurrent, and construct validity. Content validity was determined through expert opinion and item validity studies. It is emphasized in the Examiner's Manual that the WJ-Ach tests sample a variety of academic skills from simple to complex, and their frequently open-ended design reflects the requirements of actual academic performance (1989). Concurrent validity is presented in the manual for ages 3, 9, and 17. According to the manual, correlations between the Woodcock-Johnson, Revised achievement clusters and other achievement measures typically range from .6 to .7 at the nine-year-old age level. However, due to restriction in range, correlations presented by the test authors are noted to possibly underestimate true population correlations (Woodcock & Johnson, 1989). Regarding construct validity, the authors indicate that moderate intercorrelations found between subtests are expected as each of the subtests assesses a different aspect of achievement. Furthermore, tests within curricular areas are more highly correlated than are tests across curricular areas.

Procedures

Permission to participate in the proposed study was obtained from at least one parent or guardian of each potential participant. A child assent script was read to all children who were given permission to participate in the study. In addition, teachers who agreed to complete checklists regarding their perceptions of students' competence were also asked to provide consent to their participation in the study.

The author administered the research instruments. Subjects were individually administered the Basic Skills Cluster of the WJ-Ach, which took an estimated fifteen minutes. Subjects were also individually administered the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (PSPCSA), which took an estimated ten minutes. The order of test administration was reversed for each subsequent participant to avoid possible test-order effects. Teacher checklists concerning participating students were distributed to each participating classroom teacher at the outset of the study, and teachers were provided approximately two to four weeks to complete the checklists. After completion of the WJ-Ach and PSPCSA, responses were scored by the examiner. Each participating student was assigned a number to replace their name, and scores for each administered scale were assigned that number for matching purposes in later analyses.

Analyses

This study examines the associations between children's perceived and actual competence among kindergarten, pre-first grade, and first grade students. Initially, demographic variables of age, gender, and ethnicity will be examined using Analysis of Variance (ANOVA) and chi-square analyses to determine if significant differences exist between groups (kindergarten, pre-first, and first grade). Relevant correlations between these variables and the measures utilized in this study (WJ-Ach, PSPCSA: children's self-ratings of academic competence, and PSPCSA: teacher ratings of cognitive competence) will also be computed. In initial analyses, both standard and raw scores on the WJ-Ach will be examined. In later analyses, the raw score on the WJ-Ach will be used to avoid potential problems with the non-linear nature of standard scores when compared to the other measures of interest, which only provide raw scores.

To examine the effect of grade level and pre-first grade placement on the correspondence between perceived and actual competence, the correspondence between perceived and actual competence will be quantified by calculating a difference score between these two measures after standardizing the measures by converting them to z-scores. Therefore, the difference score reflects the discrepancy between their actual academic standing and their perceived standing on a common metric. The same method is used in determining an index between teacher ratings and children's perceived competence, providing an additional measure of children's perceived competence vs. another objective measure.

To address whether grade level or transition-grade placement effects these difference scores, Analyses of Covariance (ANCOVAs) will be conducted with group, gender, and ethnicity as independent variables and the administered measures (WJ-Ach, PSPCSA-perceived competence, and PSPCSA-teacher ratings) as well as the difference scores (perceived competence/WJ-Ach and perceived competence/ teacher ratings) as dependent variables. Age will be included as a covariate. It is hypothesized that difference scores will significantly differ from one another, and that results will indicate that pre-first grade children are most accurate in their perceived competence relative to their actual skill level. Specifically, the correspondence between perceived and actual competence will be greater for children in pre-first grade than for children in kindergarten or first grade. To further assess the nature of significant differences between means (in the event of significant results from the ANCOVA) post-hoc comparison of ANCOVA results will be conducted as necessary.

To assess potential group differences in the strength of relationship between actual and perceived competence, a second set of analyses utilizing multiple regression will additionally be completed. Specifically, this addresses the second hypothesis, previously discussed, that children's perceived competence will be predicted by their actual academic competence (as assessed by the WJ-Ach Basic Skills Cluster), exposure to failure (i.e., placement in pre-first grade vs. non-placement), and the interaction between achievement and exposure to failure. Age is also included as a control variable.

To provide additional information beyond what is examined in addressing the second hypothesis, a second multiple regression analysis will be conducted with perceived competence as the dependent variable (as in the first analysis), and teacher ratings, exposure to failure, the interaction between teacher ratings and exposure to failure, and age as predictor variables.

CHAPTER 4
RESULTS

Preliminary Analyses

Descriptive statistics for the various demographic groups are summarized in Table 1. Overall, participants' mean age was six years, eleven months (SD = 7.70 months), ranging from five years, eight months to eight years, eight months. Age of participating students increased with grade level. Participants included male and female, Caucasian and African American students.

To examine differences between grades related to the demographic variables, analysis of variance (ANOVA) and chi-square analyses (χ^2) were conducted.

Concerning age, results revealed a significant main effect for group, F (2, 145) = 101.70, $p < .05$. The ANOVA summary table for age is presented in Table 2. Post-hoc analyses using Tukey's HSD test for pairwise comparisons indicated significant differences in mean age between kindergarten, pre-first, and first grade students (Ms = 74.80, 85.40, and 88.40, SDs = 5.21, 3.56, and 5.90, respectively, ps < .05).

Table 1

Demographic Characteristics of the Sample

Variable	Kindergarten	Pre-First	First Grade
	Grade Level		
Age in months			
M	74.8	85.4	88.4
SD	5.2	3.6	5.9
Gender (*n*)			
Boys	22	28	28
Girls	28	20	22
Race (*n*)			
Caucasian	45	40	43
African American	5	8	7

Regarding gender, χ^2 analyses were performed to assess significant differences between groups. Results indicated that the three groups did not differ significantly in gender composition, χ^2 (2, N = 148) = 2.35, $p > .05$). Concerning ethnicity, mean comparisons also indicated that the three compared groups did not differ in ethnic composition, χ^2(2, N = 148) = 0.95, $p > .05$).

Table 2

Summary ANOVA Table for Age (N=148)

Source of Variance	df	SS	MS	F
Model	2	5091.30	2545.60	101.70*
Error	145	3629.50	25.0	

*p < .001.

Descriptive Statistics and Related Analyses for Measures of Achievement and Perceived Competence

Woodcock-Johnson, Revised-Tests of Achievement

Descriptive statistics for the Woodcock-Johnson, Revised-Tests of Achievement (WJ-Ach) are presented by grade level in Table 3. Both standard and raw scores are included. WJ-Ach results include both total Basic Skills Cluster scores, as well as subtest standard and raw scores for Letter/Word Identification, Applied Problems, and Dictation. As illustrated by examination of the mean standard scores, participants scored within one SD of the mean on each measure administered, as well as on the overall Basic Skills Cluster, suggesting that their performance is comparable to the mean performance of the WJ-Ach standardization sample.

Table 3

Descriptive Statistics for WJ-Ach Scores, by Grade Level

	Kindergarten		Pre-First Grade		First Grade	
Variable	M	SD	M	SD	M	SD
Standard Scores						
Basic Skills Cluster	96.20	13.15	93.46	13.34	106.44	15.01
Letter/Word Identification	95.80	12.59	93.10	15.18	107.04	13.71
Applied Problems	97.26	15.21	97.02	13.35	107.38	20.01
Dictation	97.42	11.37	93.65	12.48	101.54	12.35
Raw Scores						
Basic Skills Cluster	45.12	9.16	57.08	9.33	72.70	10.19
Letter/Word Identification	14.84	3.94	19.56	5.55	27.56	4.54
Applied Problems	18.60	3.84	22.27	3.27	25.98	3.96
Dictation	11.68	2.20	15.25	3.03	19.16	3.38

One-way ANOVAs were conducted to determine differences in standard scores for the WJ-Ach Basic Skills Cluster by group (kindergarten, pre-first, and first grade). The ANOVA summary table is presented in Table 4. The main effect of group was significant (F [2, 145] = 12.03, $p < .001$). Post-hoc analyses using Tukey's HSD test indicated that first grade students' scores were significantly higher than both kindergarten and pre-first students' scores ($p < .05$). However, there was not a significant difference between kindergarten and pre-first grade students' cluster scores.

Table 4

Summary ANOVA Table for WJ-Ach Standard Scores (Basic Skills Cluster) by Grade Level

Source of Variance	df	SS	MS	F
Model	2	4626	2313	12.03*
Error	145	27882	192	

*$p < .001$.

Tables 5, 6, and 7 present ANOVA summary tables for WJ-Ach standard scores on the subtests comprising the Basic Skills Cluster: Letter/Word Identification, Applied Problems, and Dictation, respectively, by grade level. For Letter/Word Identification the main effect of group was significant (F [2, 145] = 14.08, $p < .001$). For Applied Problems and Dictation the main effect of group was also significant (Fs [2, 145] = 6.40 and 5.24, respectively, ps < .05). Post-hoc analysis indicated that first grade students (M = 107.04, SD = 13.71) scored significantly higher on Letter/Word Identification than did kindergarten and pre-first graders (Ms = 95.80 and 93.10, SDs = 12.59 and 15.18), although the difference between standard score means for kindergarten and pre-first grade students was not significant. Concerning Applied Problems, post-hoc analysis indicated first grade students scored significantly higher than kindergarten and pre-first grade students (Ms = 107.38, 97.26, 97.02, SDs = 20.01, 15.21, 13.35, respectively). Kindergarten and pre-first grade students' scores on the Applied Problems subtest were not found to be significantly different. Results of post-hoc analysis for standard scores on Dictation indicated that first graders (M = 101.54, SD = 12.35) scored significantly higher than did pre-first graders (M = 93.65, SD = 12.48); in contrast, kindergarten (_M_ = 97.42, _SD_ = 11.37) and first grade students' scores were not significantly different.

Table 5

Summary ANOVA Table for WJ-Ach Standard Scores on Letter/Word Identification, by Grade Level

Source of Variance	_df_	_SS_	_MS_	_F_
Model	2	5401	2701	14.08*
Error	145	27820	102	

*_p_ < .001.

Table 6

Summary ANOVA Table for WJ-Ach Standard Scores on Applied Problems, by Grade Level

Source of Variance	_df_	_SS_	_MS_	_F_
Model	2	3471	1736	6.40*
Error	145	39330	271	

*_p_ < .05.

Table 7

Summary ANOVA Table for WJ-Ach Standard Scores on Dictation, by Grade Level

Source of Variance	df	SS	MS	F
Model	2	1528	764	5.24*
Error	145	21136	146	

*$p < .05$.

Table 8 presents WJ-Ach descriptive statistics for the Basic Skills Cluster and each individual subtest by gender. As was noted for scores presented by grade level, standard scores for each subtest and the overall cluster for boys and girls fell within one SD of the mean. To assess differences between mean performance related to gender, t-tests were conducted with standard scores for the cluster and each individual subtest. Results indicated that mean scores did not differ significantly on either the Basic Skills Cluster (t [146] = 0.10, $p > .05$) or the individual subtests (Letter/Word Identification: t [146] = -0.07, $p >$

.05; Applied Problems: *t* [146] = 0.26, *p* > .05; and Dictation: *t* [146] = -0.67, *p* > .05).

Table 9 presents WJ-Ach results by racial/ethnic group. Again, standard scores on the WJ-Ach indicated mean scores for participants of each ethnic group fell within one *SD* of the mean. Mean scores were again compared using *t*-tests. Results indicated that with one exception (Applied Problems), no significant differences in WJ-Ach scores for the two ethnic groups were observed. Specifically, results were as follows: Basic Skills Cluster, *t* (146) = 1.75, *p* > .05; Letter/Word Identification: *t* (146) = 1.39, *p* > .05; Dictation: *t* (146) = 0.57, *p* > .05. Regarding the Applied Problems subtest, the mean score for Caucasian students (*M* = 102.1, *SD* = 16.8) was found to be significantly higher than the mean score for African American students (*M* = 91.3, *SD* = 15.9, *t* [146] = 2.68, *p* < .05).

To further examine results of the WJ-Ach, raw scores were also analyzed. Mean WJ-Ach performance in raw scores are presented by grade placement, gender, and ethnicity in Tables 3, 8, and 9.

Table 8

Descriptive Statistics for WJ-Ach Scores by Gender

	Boys		Girls	
Variable	M	SD	M	SD
Standard Scores				
Basic Skills Cluster	98.88	15.08	98.64	14.74
Letter/Word Id.	98.64	15.73	98.81	14.33
Applied Problems	100.95	18.13	100.21	15.91
Dictation	96.94	12.36	98.31	12.53
Raw Scores				
Basic Skills Cluster	59.62	15.18	56.87	14.45
Letter/Word Id.	21.22	7.25	20.06	6.87
Applied Problems	22.85	4.95	21.66	4.54
Dictation	15.55	4.25	15.16	4.22

Table 9

Descriptive Statistics for WJ-Ach Scores by Ethnicity

	Caucasian		African American	
Variable	M	SD	M	SD
Standard Scores				
Basic Skills Cluster	99.61	14.33	93.40	17.42
Letter/Word Id.	99.40	14.56	94.40	17.59
Applied Problems	102.05	16.83	91.30	15.92
Dictation	97.82	12.15	96.10	14.25
Raw Scores				
Basic Skills Cluster	58.87	14.82	54.75	14.91
Letter/Word Id.	20.85	7.06	19.50	7.19
Applied Problems	22.63	4.78	20.05	4.26
Dictation	15.39	4.25	15.20	4.21

Results of ANOVA for WJ-Ach raw scores (total and subtest scores) by grade level are presented in Tables 10, 11, 12, and 13. For the Basic Skills Cluster and each subtest, the main effect of group was significant, *F*s (2, 145) = 104.36, 93.07, 49.50, and 82.60, *p*s < .001. Post-hoc analysis using Tukey's HSD indicated that for each comparison, first grade students scored significantly higher than pre-first graders and kindergartners, and pre-first graders scored significantly higher than did kindergartners (*p*s < .001). When considering raw scores on the WJ-Ach, one would expect that first grade students would score higher than students would in the other two groups due to their increased level of school experience and opportunities for learning academic material.

Additional analyses using WJ-Ach raw scores by gender and ethnic group were also conducted. As was the case for standard scores, no significant differences were found between boys and girls or between Caucasian and African American students on either total raw scores or individual subtest performance, with the exception of the Applied Problems subtest. On this subtest, when compared by ethnic group, Caucasian students' raw score (*M* = 22.63, *SD* = 4.78) was significantly higher than the mean score

Table 10

Summary ANOVA Table for WJ-Ach Raw Scores (Basic Skills Cluster), by Grade Level

Source of Variance	df	SS	MS	F
Model	2	19124.60	9562.30	104.36*
Error	145	13285.40	91.60	

*p < .001.

Table 11

Summary ANOVA Table for WJ-Ach Raw Scores on Letter/Word Identification, by Grade Level

Source of Variance	df	SS	MS	F
Model	2	4131.90	2066.00	93.07*
Error	145	3218.90	22.20	

*p < .001.

Table 12

Summary ANOVA Table for WJ-Ach Raw Scores on Applied Problems, by Grade Level

Source of Variance	df	SS	MS	F
Model	2	1361.60	680.80	49.50*
Error	145	1994.50	13.80	

*p < .001.

Table 13

Summary ANOVA Table for WJ-Ach Raw Scores on Dictation, by Grade Level

Source of Variance	df	SS	MS	F
Model	2	1399.70	699.85	82.60*
Error	145	1228.60	8.47	

*p < .001.

of African American students (M = 20.05, SD = 4.26), t (146) = 2.28, $p < .05$. For gender, t-test results yielded t

(146) = 1.12, $p > .05$ for the raw score total. On the Letter/Word Identification subtest, t-test results yielded t (146) = 1.00, $p > .05$. On the Applied Problems and Dictation subtests, results yielded t (146) = 1.52, $p > .05$, and t (146) = 0.57, $p > .05$, respectively. For ethnicity, t-tests yielded t (146) = 1.16, $p > .05$ for the raw score total. On the Letter/Word Identification and Dictation subtests, results yielded t (146) = 0.79, $p > .05$, and t (146) = 0.19, $p > .05$, respectively.

Pictorial Scale of Perceived Competence and Social Acceptance

Students' self-ratings on the cognitive subscale of the Pictorial Scale of Perceived Competence and Social Acceptance (PSPCSA) are presented as raw scores only (with a possible range of 6 to 24) because the scale does not provide standard scores. Teacher ratings on the Cognitive subscale of the PSPCSA are also presented as raw scores (with a possible range of 6 to 24). Table 14 presents descriptive statistics for the variables of PSCPSA-perceived cognitive competence and PSPCSA-teacher ratings of cognitive competence by grade level. Additionally, Tables 15 and 16 present PSPCSA results by gender and ethnic group.

Table 14

Descriptive Statistics for PSPCSA, by Grade Level

	Grade Level					
	K		P-1		1	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*
PSPCSA- Student Ratings	19.36	3.87	19.65	3.24	21.46	2.17
PSPCSA- Teacher Ratings	15.88	6.63	16.17	4.88	17.98	6.05

To compare students' self-ratings of perceived competence across grade levels, gender, and ethnicity, ANOVA and t-tests were again conducted. Results of ANOVA by grade level are presented in Table 17 and indicate a significant difference between means (*F* [2, 145] = 6.43, *p* < .05). Post-hoc analyses indicate that first grade students (*M* = 21.46, *SD* = 2.17) scored significantly higher than kindergarten and pre-first grade students (*M*s = 19.36, 19.65, *SD*s = 3.87, 3.24, respectively).

Table 15

Descriptive Statistics for PSPCSA, by Gender

	Boys		Girls	
Variable	M	SD	M	SD
PSPCSA- Student Ratings	20.09	3.35	20.24	3.23
PSPCSA- Teacher Ratings	16.76	6.01	16.60	5.91

Table 16

Descriptive Statistics for PSPCSA, by Ethnicity

	Caucasian		African American	
Variable	M	SD	M	SD
PSPCSA- Student Ratings	20.16	3.28	20.15	3.39
PSPCSA- Teacher Ratings	17.31	5.79	12.70	5.52

No significant difference was noted in comparisons of self-ratings of perceived competence between kindergarten and pre-first grade students.

Results of $\underline{t}$-tests did not indicate a significant difference in self-reports of perceived competence provided by boys ($\underline{M}$ = 20.09, $\underline{SD}$ = 3.35) and girls ($\underline{M}$ = 20.24, $\underline{SD}$ = 3.23), $\underline{t}$ (146) = -0.28, $\underline{p}$ > .05. In addition, Caucasian ($\underline{M}$ = 20.16, $\underline{SD}$ = 3.28) and African American students' ($\underline{M}$ = 20.15, $\underline{SD}$ = 3.39) self-ratings on the PSPCSA were not significantly different, $\underline{t}$ (146) = 0.02, $\underline{p}$ > .05.

ANOVA and $\underline{t}$-tests were conducted for teacher ratings to determine any possible significant differences related to grade level, gender, or ethnicity. For teacher ratings, the main effect of group was not significant, $\underline{F}$(2, 145) = 1.85, $\underline{p}$ > .05. T-tests conducted to assess differences in teacher ratings attributable to gender were not significant ($\underline{t}$ [146] = 0.16, $\underline{p}$ > .05). In contrast, a significant difference was found between group means by ethnicity ($\underline{t}$ [146] = 3.33, $\underline{p}$ < .05), with the mean teacher rating of 17.30 ($\underline{SD}$ = 5.79) for Caucasian students being significantly greater than the mean teacher rating of 12.70 ($\underline{SD}$ = 5.52) for African American students.

Table 17

Summary ANOVA Table for PSPCSA-Perceived Competence, by Grade Level

Source of Variance	*df*	*SS*	*MS*	*F*
Model	2	129.20	64.60	6.43*
Error	145	1456.90	10.00	

*$p < .05$.

Table 18

Summary ANOVA Table for PSPCSA-Teacher Ratings, by Grade Level

Source of Variance	*df*	*SS*	*MS*	*F*
Model	2	129.10	64.60	1.85
Error	145	5068.90	35.00	

To examine relationships among the variables of interest (WJ-Ach, PSPCSA-cognitive competence, and PSPCSA Teacher Rating Scale-cognitive competence), Pearson Product

Moment correlations were calculated. The full correlation matrix is presented in Table 19. As shown in this table, scores on the WJ-Ach Basic Skills Cluster and on individual subtests are significantly correlated with scores on other components of the WJ-Ach, as well as with student and teacher ratings of academic competence as assessed by the PSPCSA. Age in months is negatively correlated with WJ-Ach standard scores (*r* = -0.19 for the Cluster, and *r*s = -0.16, -0.01, and -0.32 for the Letter/Word Identification, Applied Problems, and Dictation subtests, respectively). As expected, age was positively correlated with WJ-Ach raw scores (*r* = 0.52 for the Cluster, and *r*s = 0.47, 0.49, and 0.49 for the corresponding subtests). Failure status was positively correlated with performance on the WJ-Ach when standard scores are considered (*r* = 0.25 for the Cluster, and *r*s = 0.26, 0.15, and 0.22 for the three subtests). Failure status was likewise positively, although not significantly, correlated with WJ-Ach raw scores. Additionally, failure status was not significantly correlated with students' perceived competence ratings or teacher ratings. Gender was not significantly correlated with performance on the WJ-Ach or ratings on the PSPCSA. Lastly, the only significant correlation with ethnicity was that with the Applied Problems subtest of the WJ-Ach (*r* =

-0.22 for the standard score, and r = -0.19 for the raw score).

Summary of Preliminary Analyses

Results of preliminary analyses indicated significant differences in age across grade levels. With the exception of one subtest, first grade students obtained significantly higher WJ-Ach standard scores than did kindergarten and pre-first grade students. Concerning WJ-Ach raw scores, first grade students obtained significantly higher scores than kindergarten and pre-first grade students; pre-first grade students likewise scored significantly higher than did kindergartners. No significant group differences were noted for standard or raw scores across gender or ethnicity, with the exception of the Applied Problems subtest. Analyses of the PSPCSA, self-ratings indicated first grade students scored significantly higher than kindergarten and pre-first grade students. No differences attributable to gender or ethnicity were noted. Concerning teacher ratings, no significant differences by grade or gender were noted; however, a significant difference was noted related to ethnic group.

Table 19

Correlation Matrix for Variables of Interest

	WJ-Std	WJ-Raw	L/W-Std	AP-Std	D-Std
WJ-Raw	0.73				
L/W-Std	0.95	0.71			
AP-Std	0.68	0.58	0.53		
D-Std	0.92	0.56	0.84	0.49	
L/W-Raw	0.72	0.96	0.78	0.45	0.54
AP-Raw	0.61	0.87	0.48	0.76	0.37
D-Raw	0.67	0.93	0.63	0.42	0.64
PC	0.35	0.40	0.37	0.23	0.28
TR	0.56	0.55	0.52	0.50	0.45
Age	-0.19	0.52	-0.16	-0.01	-0.32
Fail	0.25	0.06	0.26	0.15	0.22
Gender	-0.01	-0.09	0.01	-0.02	0.06
Ethnic	-0.14	-0.10	-0.11	-0.22	-0.05

Table 19, Continued

	L/W-Raw	AP-Raw	D-Raw	PC	TR
AP-Raw	0.72				
D-Raw	0.87	0.72			
P C	0.40	0.32	0.37		
T R	0.50	0.54	0.49	0.26	
Age	0.47	0.49	0.49	0.15	0.10
Fail	0.11	0.00	0.02	0.11	0.06
Gender	-0.08	-0.13	-0.05	0.02	-0.01
Ethnic	-0.07	-0.19	-0.02	-0.00	-0.27

	Age	Fail	Gender
Fail	-0.23		
Gender	-0.10	0.08	
Ethnic	0.05	-0.06	0.06

Note. WJ-Std = WJ-Ach Basic Skills Cluster standard score; WJ-Raw = WJ-Ach Basic Skills Cluster raw score; L/W-Std = Letter/Word Identification, standard score; AP-Std = Applied Problems, standard score; D-Std = Dictation, standard score; L/W-Raw = Letter/Word Identification, raw score; AP-Raw = Applied Problems, raw score; D-Raw =

Dictation, raw score; PC = PSPCSA-student self-ratings; TR = PSPCSA-teacher ratings; Age = age in months; Fail = failure status (placement in pre-first grade vs. non-placement); Ethnic = ethnicity.

Primary Analyses

The primary purpose of this study is to examine the effect of transition grade placement on the correspondence between perceived and actual competence. Specifically, the correspondence between perceived and actual competence is hypothesized to be greater for children placed in transition-grade programs than for students in kindergarten and first grade classes. A second purpose of this study is to assess the extent to which children's perceived competence is predicted by selected variables (including actual competence, exposure to failure, and the interaction of these variables). Age is also included as a predictor variable to control for significant differences in age between groups. An additional analysis using teacher ratings as a predictor variable is also presented.

Outlier Analyses and Calculation of Difference Scores

Before analyses were conducted using the primary variables (WJ-Ach scores, perceived competence scores, and teacher ratings), screening was conducted to assess the presence of outliers. When using the mean +/- 3 SD criterion as provided by SPSS, no outliers were identified when examining any of the primary dependent variables.

To examine the effect of grade level and exposure to failure on the correspondence between perceived and actual competence, a difference score method using the total WJ-Ach scores (raw scores) and PSPCSA-perceived competence score (raw score) or teacher ratings (raw score) was used. Test scores were first standardized by converting them to *z*-scores. Then, the correspondence between perceived and actual competence was quantified by calculating a difference between the two measures of interest. Therefore, the difference scores reflect the discrepancy between participants' actual academic standing and their perceived standing on a common metric. Positive *z*-scores indicate that the student overestimated his or her academic achievement relative to their actual skill level, while negative scores indicate an underestimate of actual academic skill levels. The same method was used in determining difference scores for the student self-ratings on the PSPCSA and the PSPCSA Teacher Rating Scale-cognitive competence subscale.

Descriptive statistics for the obtained difference scores are presented in Table 20.

Group Comparisons on Variables of Interest

To assess group differences on measures of actual achievement, perceived competence, and teacher ratings of competence, one-way analyses of covariance (ANCOVAs) were conducted with group (kindergarten, pre-first grade, and first grade), gender, and ethnicity as independent variables, and each of the three performance measures (WJ-Ach, PSPCSA-student ratings of perceived competence, and PSPCSA-teacher ratings) and two difference scores (Perceived Competence/WJ-Ach and Perceived Competence /Teacher Ratings) as dependent variables. Age was included as a covariate to control for significant differences in age between groups.

Table 21 presents the ANCOVA summary table for the WJ-Ach raw score results. For WJ-Ach scores, the main effect of group was significant (F [2, 135] = 28.47, $p < .001$). Gender, ethnicity, and the interactions between the variables of group, gender, and ethnicity were not significant, $ps > .05$. Post-hoc analyses indicated that, when controlling for age, first grade students obtained significantly higher WJ-Ach raw scores ($M = 72.70$, $SD = 10.19$) than did kindergarten ($M = 45.12$, $SD = 9.16$) or pre-first grade students ($M = 57.08$, $SD = .33$), $ps < .001$). Additionally, results indicated that pre-first grade

Table 20

Descriptive Statistics for Difference Scores by Grade Level

Variable	Kindergarten		Pre-First		First	
	M	SD	M	SD	M	SD
Perceived Comp/ WJ-Ach raw score	0.66	1.13	-0.08	0.89	-0.56	0.90
Perceived Comp/ Teacher Ratings	-0.01	1.42	-0.27	0.82	0.27	1.21

students demonstrated significantly higher WJ-Ach scores than did kindergarten students ($p < .05$).

Results of univariate ANCOVA for student's perceived competence scores on the PSPCSA are presented in Table 22. For students' self-ratings on the PSPCSA, ANCOVA revealed a significant main effect for group (F [2, 135] = 3.41, $p < .05$). As was the case in comparisons of WJ-Ach raw scores, gender, ethnicity, and the interactions between gender, ethnicity, and group were not significant (ps > .05). Post-hoc analyses indicate that first-grade students (M = 21.46, SD = 2.17) indicated significantly higher levels of perceived competence than children in pre-first grade (M =

19.48, SD = 3.22), p < .05). Differences in perceived competence scores between kindergarten (M = 19.36, SD = 3.87) and pre-first grade students, and kindergarten and first grade students were not significant (p > .05).

The ANCOVA summary table for PSPCSA-teacher ratings is presented in Table 23. For teacher ratings of children's cognitive competence, the main effects of, and interactions between group, gender, and ethnicity were not significant (ps > .05).

To assess group differences in the WJ-Ach/perceived competence (student self-ratings) difference scores, univariate ANCOVA was again completed with group as the independent variable, and the difference score as the dependent variable. An additional ANCOVA examining group effects on the teacher ratings/perceived competence difference scores was also conducted. The ANCOVA summary table with the WJ-Ach/Perceived Competence difference score is presented in Table 24. For this difference score, the main effect of group was significant (F [2, 135] = 4.12, p < .05), although the main effects of additional variables and relevant interactions were not significant (ps > .05). Post-hoc analyses indicated that the WJ-Ach/PSPCSA-student self-ratings difference score for kindergarten students

Table 21

Summary ANCOVA Table, WJ-Ach Raw Score Total, by Grade Level

Source of Variance	df	SS	MS	F
Corrected Model	12	20015.38	1667.95	18.17*
Intercept	1	1637.80	1637.80	17.84*
Age	1	0.60	0.60	0.01
Group	2	5228.49	2614.24	28.47*
Gender	1	49.23	49.23	0.54
Ethnicity	1	101.14	101.14	1.13
Group X Gender	2	280.28	140.14	1.53
Group X Ethnicity	2	15.40	7.70	0.08
Gender X Ethnicity	1	49.23	49.23	0.54
Group X Gender X Ethnicity	2	215.03	107.52	1.17
Error	135	12394.69	91.81	

*$p < .05$.

Table 22

Summary ANCOVA Table, PSPCSA-Student Self-Ratings of Perceived Competence, by Grade Level

Source of Variance	df	SS	MS	F
Corrected Model	12	207.48	17.29	1.69
Intercept	1	208.52	208.52	20.39*
Age	1	0.09	0.09	0.01
Group	2	69.68	34.84	3.41*
Gender	1	14.71	14.71	1.44
Ethnicity	1	7.83	7.83	0.77
Group X Gender	2	39.12	19.56	1.91
Group X Ethnicity	2	3.83	1.91	0.19
Gender X Ethnicity	1	12.48	12.48	1.22
Group X Gender X Ethnicity	2	31.96	15.98	1.56
Error	135	1380.79	10.23	

*$p < .05$.

Table 23

Summary ANCOVA Table, PSPCSA-Teacher Ratings of Perceived Competence, by Grade Level

Source of Variance	*df*	*SS*	*MS*	*F*
Corrected Model	12	666.90	55.76	1.71
Intercept	1	13.67	13.67	0.42
Age	1	58.90	58.90	1.81
Group	2	58.49	29.24	0.90
Gender	1	26.82	26.82	0.83
Ethnicity	1	63.93	63.93	1.97
Group X Gender	2	164.85	82.42	2.54
Group X Ethnicity	2	77.71	38.85	1.20
Gender X Ethnicity	1	72.75	72.75	2.24
Group X Gender X Ethnicity	2	65.54	32.77	1.01
Error	135	4388.53	32.51	

Table 24

Summary ANCOVA Table for WJ-Ach/Perceived Competence Difference Scores

Source of Variance	df	SS	MS	F
Corrected Model	12	45.30	3.78	3.83*
Intercept	1	0.02	0.02	0.02
Age	1	0.00	0.00	0.00
Group	2	8.12	4.06	4.12*
Gender	1	2.69	2.69	2.73
Ethnicity	1	2.37	2.37	2.40
Group X Gender	2	1.09	0.54	0.55
Group X Ethnicity	2	0.28	0.14	0.14
Gender X Ethnicity	1	2.40	2.40	2.43
Group X Gender X Ethnicity	2	0.80	0.40	0.41
Error	135	133.07	0.99	

*$p < .05$.

(M = 0.66, SD = 1.13) was significantly different from those obtained from pre-first or first graders (Ms = -0.11 and -0.56, SDs = 0.89 and 0.90, respectively, $ps < .05$). These results indicated that kindergartners demonstrated a tendency to overestimate their academic skills relative to their actual skill level. Although not significantly different from scores for first grade students ($p > .05$), pre-first graders appeared to provide relatively more accurate estimates of their competence, while first graders exhibited a tendency to underestimate their academic competence relative to their actual academic achievement.

Results of ANCOVA for the teacher ratings/perceived competence difference scores are presented in Table 25. Results indicated the main effects of group, gender, and ethnicity were not significant. However, a significant interaction between gender and ethnic group was found, (F [1, 135] = 4.61, $p < .05$). Post-hoc analyses indicated that when the interaction between gender and ethnicity is considered, teacher ratings of pre-first grade students were significantly different from that of first graders, $p > .05$. Kindergarten students' difference scores were not significantly different from those of either pre-first or first graders ($p > .05$).

Table 25

Summary ANCOVA Table for Perceived Competence/Teacher Ratings Difference Scores

Source of Variance	df	SS	MS	F
Corrected Model	12	20.84	1.74	1.25
Intercept	1	2.42	2.42	1.74
Age	1	1.95	1.95	1.41
Group	2	4.89	2.45	1.76
Gender	1	4.20	4.20	3.03
Ethnicity	1	4.90	4.90	3.53
Group X Gender	2	0.13	0.07	0.05
Group X Ethnicity	2	1.50	0.75	0.54
Gender X Ethnicity	1	6.40	6.40	4.61*
Group X Gender X Ethnicity	2	0.14	0.07	0.05
Error	135	187.51	1.40	

*$p < .05$.

Analyses of Relationships Between Academic Achievement and Perceived Competence

Multiple regression analysis was used to assess the relationships between perceived competence (as the dependent variable) and selected predictor variables. To address whether the obtained data met the assumptions for conducting multiple regression, the normality assumption was addressed through examination of the distribution of residuals against the predicted values. Charts generated through SPSS suggested that the residuals for each of the multiple regression were normally distributed. Scatterplots of predicted values against standardized residuals did not reflect a distinct pattern, suggesting that the assumptions for multiple regression were met.

Findings of the multiple regression analyses will be discussed first across the group as a whole and then within each group (by grade level). The primary multiple regression analysis included students' perceived competence as the dependent variable, with age (in months), WJ-Ach raw score (total), exposure to failure (yes vs. no, or pre-first grade placement vs. non-placement), and the interaction between WJ-Ach raw scores and exposure to failure. An additional regression analysis likewise included perceived competence as the dependent variable, and age, teacher ratings of competence, exposure to failure, and the interaction between teacher ratings and perceived competence as predictors.

The summary ANOVA table and results for the first regression analysis are presented in Tables 26 and 27. Results indicated that the overall multiple correlation ($\underline{R}$) is .426 ($\underline{R}^2 = .181$). The adjusted $\underline{R}^2$ for the regression model indicated that 16% of the variance in perceived competence is accounted for the by the predictors of age, WJ-Ach scores, exposure to failure, and the interaction between exposure to failure and performance on the WJ-Ach. As failure status was not determined to be a significant predictor of perceived competence for the group ($\underline{n} = 148$) as a whole ($\underline{p} > .05$), results of this analysis did not support the hypothesis that exposure to failure (or placement in the pre-first grade program) contributes significantly to the prediction of students' perceived competence. However, the WJ-Ach raw score total was found to be a significant predictor of perceived competence across groups ($\underline{p} = .001$).

The summary ANOVA table and results for the second regression analysis are presented in Tables 28 and 29. Results indicated that the overall multiple correlation ($\underline{R}$)

Table 26

Summary ANOVA Table for Multiple Regression Across Groups: Age, WJ-Ach score, Exposure to Failure, and the Interaction between WJ-Ach and Exposure to Failure Regressed on Perceived Competence

Source of Variance	df	SS	MS	F	R^2	R^2(adj.)
Regression	4	287.86	71.97	7.91	0.18	0.16*
Residual	143	1300.41	9.09			

*$p < .001$

is .423 ($R^2 = .18$). The adjusted R^2 for the regression model indicated that approximately 16% of the variance in perceived competence was accounted for by the predictors of age, exposure to failure, teacher ratings, and the teacher ratings/failure status interaction. In contrast to findings of the first regression analysis (involving WJ-Ach scores and exposure to failure as predictor variables), findings from the second analysis (including teacher ratings and exposure to failure as predictor variables) indicated that failure status and the interaction between failure status and teacher ratings were significant ($ps < .05$).

Table 27

Results: Age, WJ-Ach, Exposure to Failure, and the Interaction Between WJ-Ach and Exposure to Failure Regressed on Perceived Competence

Variable	Regression Coefficient	Standard Error	Standardized Regression Coefficient
Age	0.02	0.04	0.01
WJ-Ach	0.07	0.02	0.34*
Failure Status	-5.42	3.16	-0.77
WJ-Ach * Failure Status	0.08	0.05	0.67

*Significant .001 level.

To follow up on the significant interaction between teacher ratings and exposure to failure (placement in the pre-first grade class), correlations were examined and additional regression analyses were completed. The Pearson correlations between student's perceived competence and teacher ratings were positive for both students in the "failure" group ($\underline{r} = .58$, $\underline{p} < .05$; pre-first grade placement) and the "non-failure" group ($\underline{r} = .21$, $\underline{p} < .001$;

Table 28

Summary ANOVA Table for Multiple Regression Across Groups: Age, Teacher Ratings, Exposure to Failure, and the Interaction Between Teacher Ratings and Exposure to Failure Regressed on Perceived Competence

Source of Variance	df	SS	MS	F	R^2	R^2(adj.)
Regression	4	283.77	70.94	7.78	0.18	0.16*
Residual	143	1304.50	9.12			

*$p < .001$.

kindergarten and first grade). However, the correlations between perceived competence and teacher ratings were more significant for students who had been placed in the pre-first grade classroom. Additional regression analyses were also conducted using students' perceived competence as the dependent variable, and teacher ratings and age in months as predictor variables. In this case, results were comparable to that seen in the comparisons of simple correlations, in that the standardized beta is larger for the pre-first graders ($\beta = .58$) than for students in kindergarten or first grade who had not experienced failure ($\beta = .18$). Results of these additional regression analyses

Table 29

Results: Age, Teacher Ratings, Exposure to Failure, and the Interaction Between Teacher Ratings and Exposure to Failure Regressed on Perceived Competence

Variable	Regression Coefficient	Standard Error	Standardized Regression Coefficient
Age	0.07	0.03	0.17**
Teacher Ratings	0.09	0.05	0.17
Failure Status	-6.92	1.98	-0.99*
Teacher Ratings * Fail Status	0.32	0.11	0.85**

*p < .05. **p < .001.

are presented in Tables 30 and 31 (students not exposed to failure, i.e., kindergarten and first graders), and Tables 32 and 33 (students with exposure to failure, i.e., pre-first graders).

Table 30

Summary ANOVA Table for Kindergarten and First Graders (no exposure to failure): Age and Teacher Ratings Regressed on Perceived Competence

Source of Variance	df	SS	MS	F	R^2	R^2(adj.)
Regression	2	94.96	47.48	4.70	0.09	0.07*
Residual	97	979.23	10.10			

*$p < .05$

Table 31

Results: Age and Teacher Ratings Regressed on Perceived Competence

Variable	Regression Coefficient	Standard Error	Standardized Regression Coefficient
Age	0.08	0.04	0.21
Teacher Ratings	0.09	0.05	0.18

Table 32

Summary ANOVA Table for Pre-First Graders (exposure to failure): Age and Teacher Ratings Regressed on Perceived Competence

Source of Variance	df	SS	MS	F	R^2	R^2(adj.)
Regression	2	164.45	82.23	11.51	0.34	0.31*
Residual	45	321.53	7.15			

$^*p < .001$.

Table 33

Results: Age and Teacher Ratings Regressed on Perceived Competence

Variable	Regression Coefficient	Standard Error	Standardized Regression Coefficient
Age	-0.00	0.11	-0.00
Teacher Ratings	0.41	0.09	0.58

Additional regression analyses were then conducted within each grade level to further evaluate the influence of WJ-Ach scores and teacher ratings on the PSPCSA on the prediction of students' perceptions of competence. Age was again included as a control variable. Regarding kindergarten students, WJ-Ach scores were again found to be a significant predictor of perceived competence ($p < .05$). Teacher ratings were not a significant predictor of perceived competence for kindergartners ($p > .05$). For pre-first graders, both WJ-Ach scores and teacher ratings were predictive of perceived competence ($p < .05$, $p < .001$, respectively). Lastly, in the first grade group, neither WJ-Ach or teacher ratings were significant predictors of perceived competence ($p > .05$). Summaries of regression results by grade levels are presented in Tables 34 and 35.

Table 34

Summary of Regression Analyses by Grade: Age and WJ-Ach Regressed on Perceived Competence

Variable	Grade								
	Kindergarten			Pre-First			First		
	B	SE B	β	B	SE B	β	B	SE B	β
Age	0.04	0.11	0.05	0.05	0.12	0.05	-0.09	0.05	-0.23
WJ-Ach	0.13	0.06	0.32*	0.16	0.05	0.46*	0.01	0.03	0.05

Note: R = .33, R^2 = .11 for Kindergarten; R = .45, R^2 = .21 for Pre-First; R = .58, R^2 = .34 for First Grade.
*$p < .05$.

Table 35

Summary of Regression Analyses by Grade: Age and Teacher Ratings Regressed on Perceived Competence

Variable	Grade								
	Kindergarten			Pre-First			First		
	B	SE B	β	B	SE B	β	B	SE B	β
Age	0.06	0.11	0.08	-0.00	0.11	-0.00	-0.09	0.05	-0.24
Teacher Ratings	0.14	0.08	0.23	0.41	0.09	0.58**	0.01	0.51	0.02

Note: $R = .26$, $R^2 = .07$ for Kindergarten; $R = .58$, $R^2 = .34$ for Pre-First; $R = .25$, $R^2 = .06$ for First Grade.
**$p < .001$.

CHAPTER 5
DISCUSSION

The purpose of the current study was to examine the relationships between the perceived competence and actual competence of three groups of children: kindergartners, pre-first grade children who had been retained in a "transitional" program, and first-graders. Preliminary analyses were conducted to examine various demographic characteristics and mean scores on the measures of interest. Further, the issue of accuracy of children's perceived competence in the area of academic skills was addressed. Results were analyzed to determine whether significant differences existed in the correspondence between perceived and actual competence for students who had been retained in a transition-grade program and those who had progressed from grade-to-grade in a routine manner. The two hypotheses and obtained results will be summarized, followed by a summary of relevant literature and an explanation of the results in relation to research in the areas of perceived competence and self-concept, particularly as related to the issue of grade retention.

The first hypothesis postulated that children placed in a retention-type program known as "pre-first" grade would be better able to evaluate their own competence than would be children attending regular classes. More specifically, it was hypothesized that the correspondence between perceived and actual competence would be greater for children placed in transition-grade programs than for students in kindergarten and first grade classes. Such results would suggest that children placed in the transition-grade program are, as a group, more accurate in assessing their academic skills than students who have not been retained. While not necessarily a positive or negative characteristic of this group, results affirming this hypothesis suggest that children who are retained in transition-grade programs exhibit a heightened awareness of their skill levels.

Results of the current study indicate that kindergarten children demonstrated a tendency to overestimate their actual academic competence compared to pre-first or first grade students, as evidenced by a positive difference score (the perceived/actual competence difference score). Pre-first grade students evidenced the most accurate perceptions of academic skills, with the difference score being closest to zero (indicating very close correspondence between perceived and actual competence). Lastly, first graders tended to underestimate their skill level, as indicated by a negative mean difference score.

Further analyses found a significant difference between these difference scores for two groups of students: specifically, the mean difference score of kindergarten students was significantly higher than that for pre-first and first grade students. However, while pre-first grade students' mean difference score was closest to zero, the score was not significantly different from that of students in first grade. Therefore, these results do not fully substantiate the first hypothesis presented in the study, in that pre-first grade students were not significantly more accurate in estimating their academic skill level than were first grade students.

The second hypothesis addressed by this study sought to examine potential group differences in the strength of relationship between perceived competence and selected predictor variables, with the expectation that placement in the pre-first grade program (or exposure to failure) would be a significant predictor of perceived competence. However, regression analyses using predictor variables of achievement and exposure to failure regressed on perceived competence did not support exposure to failure as a significant predictor of perceived competence. Additionally, the interaction between pre-first grade placement and academic achievement (as assessed by the WJ-Ach) was not found to be significant. Therefore, the second hypothesis also was not supported. However, academic achievement was found to be a significant predictor of perceived competence. This finding is not surprising, as perceived and actual competence (as assessed by direct measures of students' academic achievement or cognitive abilities) have been found to be associated through previous research (i.e., Anderson & Adams, 1985).

Interestingly, regression analysis including predictor variables of exposure to failure and teacher ratings of students' academic competence regressed on perceived competence yielded significant results. More specifically, the correlation between perceived competence and teacher ratings of academic competence is more significant for students with exposure to failure than for students who have not. Several explanations for this finding seem likely, and warrant further investigation. Previous research in the area of teacher-student interactions as related to academic achievement has indicated that students with lower levels of academic skills receive an increased level of criticism from teacher than do higher-ability students (Simonson & Strein, 1997). This could provide some explanation for the findings presented here, although the current study does not directly address the issue of specific student-teacher interactions or the impact of teacher perceptions on student perceptions of competence in relation to failure status. In addition, the current study suggests that younger students may exhibit self-perceptions of competence which are more closely aligned with teacher ratings than previous research has indicated. For instance, Stipek (1981) indicated that perceived competence was not related to teacher ratings of ability until students were in the second or third grade.

This study has its foundations in educational and psychological research in the areas of self-concept, perceived competence and grade retention as they relate to early childhood development and education. The self-concept has been a focus of study for historically significant researchers including James, Piaget, Cooley, and Gesell, as well as a continuing area of interest in contemporary studies. Regarding educational experiences, research has suggested that positive self-concepts can influence outcomes including academic achievement (Marsh et al., 1991). Children learn to describe and evaluate themselves during the early school years (Harter, 1996a), and have been shown to become increasingly accurate and critical in their self-evaluations as they develop (i.e., Gesell & Ilg, 1946; Harter, 1986). Furthermore, as children develop, specific facets of self-concept are further differentiated from one another (Shavelson et al., 1976).

Perceived competence has been regarded as an additional dimension of overall self-concept, one that emphasizes children's beliefs about their ability to be effective and successful in particular tasks (Marshall, 1989). Feelings of competence are significantly related to positive feelings towards the self (Verschueren et al., 1996). Significant associations between children's perceived and actual academic competence have been found in studies with children of kindergarten age and younger (Simonson & Strein, 1997; Stipek & Hoffman, 1980). Additionally, the development of perceived competence has been found to be similar to that of general self-concept, in that one's estimations and perceptions of skills become increasingly accurate as one matures (Harter, 1996a; Parsons & Ruble, 1977). This general pattern was suggested by the current findings, with children becoming more critical in their self-evaluations as they progress from grade to grade.

Retention can play an additional role in the development of children's self-concept and perceptions of competence. Research on and critics of retention consistently suggest that grade retention does not lead to significant improvements in student performance (i.e., Karweit & Wasik, 1992; Meisels, 1992; Peterson et al., 1987; Shepard & Smith, 1987; Shepard & Smith, 1989). When considering the effects of retention on children's self-concept or self-esteem, it has also been noted that retention does not lead to improvements in self-image or more positive self-concepts; rather, retention has been associated with negative self concept or a sense of failure (Dennebaum & Kulbert, 1994; Niklason, 1984; Shepard & Smith, 1989). Elkind (1987) further noted that young children are aware of their lack of progress as compared to successful same-age peers. As suggested by the current results, students retained in a transition-grade program are relatively accurate judges of their academic skill level. However, as exposure to failure was not predictive of perceived competence, placement in the pre-first grade program does not appear to influence such judgements to a significant degree.

Regarding findings of the current study, the tendency for kindergartners to overestimate their skill levels is not surprising, given the developmental sequence of self-concept/perceived competence development in which children become more self-critical and accurate in their perceived competence as they age (Gesell & Ilg, 1946; Harter, 1988; Harter, 1996a; Stipek, 1984). Kindergarten students' overestimations of their actual skill level, pre-first grade students' tendency toward accuracy (although not a significant finding), and first grade students' tendency toward underestimates of their academic skill (again, to a non-significant degree) may be explained by the maturational trend in self-concept/perceived competence development (Gesell & Ilg, 1946; Harter, 1996a). Pre-first graders could have become more accurate in their self-evaluations subsequent to what they may have been at kindergarten age, and were assessed prior to becoming slightly more critical of their skills as first graders.

Other possible explanations for these results include the increasing emphasis on academic skills as young children progress from grade to grade (Shepard & Smith, 1988). As children move from kindergarten to first grade they are expected to become increasingly achievement-oriented. Therefore, they may receive more feedback regarding their academic successes and failures as they progress from grade to grade, and may tend to judge themselves more critically as they mature.

The failure to find significant differences in the correspondence between perceived competence/academic achievement between each grade level suggests that pre-first grade children are not significantly more attuned to their academic successes than children who do not participate in the retention program. Significant results suggesting that pre-first grade students are significantly more aware of their academic skill level (or deficits in academic skills) would have led to various plausible explanations. For instance, placement in the self-contained classroom environment, often located in a separate area from other kindergarten or first grade classrooms, could have been a mediating factor contributing to differing perceptions of competence. However, the lack of consistently significant findings suggests that being in the pre-first grade class does not appear to have a significant impact on students' perceptions of competence. This is a somewhat optimistic finding, suggesting that transition-grade programs may be a viable alternative to traditional retention programs commonly regarded as exerting a significant negative influence on children's social-emotional development.

Concerning the regression analysis involving teacher ratings which yielded significant results, a reasonable explanation is that teacher-student interactions may be somewhat different for pre-first grade children, as opposed to those in kindergarten or first grade. Perhaps the pre-first grade children received more feedback concerning their academic performance from their teachers as a result of their participation in the retention-based program. As research has shown that children who demonstrate lower academic skill levels receive more criticism from teachers (Simonson & Strein, 1997), this seems to be a plausible explanation. The finding that the interaction between teacher ratings and exposure to failure was a significant predictor of perceived competence suggests that teacher perceptions of students' skill level, and possibly teacher-student interactions, could have a significant and lasting impact on children's self-perceptions of academic skill.

Implications of the Current Study

As the issues of retention and increasing academic demands on young children are frequently considered by school personnel, the finding that placement in the pre-first program is not a significant predictor of children's perceived competence is an important one to consider. This is particularly important given the typical research findings which often emphasize the negative impact of retention on children's self-concept, including feelings of failure, disappointment, and a lack of persistent benefits related to school performance and behavior (i.e., Elkind, 1987; Shepard & Smith, 1989). While transition-grade programs are at times considered an alternative to traditional retention, for all practical purposes children placed in such classes are retained for an additional year of school; therefore, such programs are criticized in much the same manner as is traditional student retention. While the current results do not suggest that the pre-first grade program is beneficial to the students participating in it, it does suggest that this form of retention does not lead students to express perceived competence in a manner significantly different from students who have progressed from kindergarten to first grade in a more routine manner.

The somewhat surprising results that the interaction between teacher ratings and children's exposure to failure were predictive of students' perceived competence has a number of potential applications in educational settings. These results emphasize the importance and significance of teacher-student interactions, and further suggest that teacher perceptions of students with academic difficulties (the typical criteria for placement in the pre-first grade program) may have an impact on students' perceived competence development.

Limitations of the Current Study

Limitations of the current study include issues relating to the sample and assessment measures utilized. Concerning the current sample, the number of subjects (N = 148)and classroom environments was relatively limited. In addition, the study examined perceptions of students from three classes within one school district. Aside from semantic differences in describing the transition-grade program (i.e., "pre-first" vs. "transition-first"), the general placement criteria are similar for each classroom setting, as is the curriculum used. Therefore, the results are not necessarily generalizable across dissimilar educational and environmental settings.

Regarding the assessment measures used, while the PSPCSA is likely the most appropriate and well-research instrument for assessing perceived competence in young children available at this time, the relatively limited number of items within the cognitive competence subscale may also be considered a limitation. The actual correspondence between the pictorial items presented in the scale and the participating children's actual academic experiences could vary. However, this might be considered to be more of a limitation in the general area of assessment of children's self-concept. As described previously, there are very few reliable and valid methods for assessing young children's self-concept.

The limited number of items found on standardized achievement tests for young children, including the WJ-Ach as used in this study, may also be considered a limitation. Particularly for the kindergarten subjects, scores derived from performance on a limited number of test items may not be entirely reflective of their academic skill level.

Suggestions for Future Research

While results of the current study do not support the hypothesis that pre-first grade students are significantly more accurate in their perceptions of academic skills, this does not suggest that the transition-grade program has a positive or negative impact on children's perceived competence. Therefore, additional research with pre-first or transition-grade students may be warranted, and might include further study of the immediate and lasting effects of transition-grade placement. Further research across a variety of transition-grade or "pre-first" settings may also be an area of possible research.

Regarding the correspondence between perceived and actual competence, examination of differences in the accuracy of self-perceptions between children in pre-first programs vs. children who are retained in regular kindergarten or first grade classrooms may also shed light on the impact of transition-grade programs. Finally, the association between teacher perceptions of student competence and students' perceived competence may be an especially significant area of further study, particularly as related to retention or placement in transitional programs.

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BIOGRAPHICAL SKETCH

Tiffany Hamilton began her education at the University of Florida in 1990. Upon obtaining a Bachelor of Science degree in 1993, with a major in psychology and minor in education, she was accepted into the doctoral program in school psychology. Tiffany was awarded the Master of Arts in Education degree in 1997. As part of the Ph.D. program, she completed an internship with the Florida State University Regional Multidisciplinary Evaluation and Consulting Center in Tallahassee, Florida. Following the internship, Tiffany was employed by the Hart County, Georgia, School System as a school psychologist. Upon completion of her doctoral degree, she plans to continue working as a school psychologist, with an emphasis on assessment of preschool and elementary school children.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree Doctor of Philosophy.

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Associate Professor of
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree Doctor of Philosophy.

Tina Smith-Bonahue

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